

MANUFACTURERS RECORD

A WEEKLY SOUTHERN INDUSTRIAL, RAILROAD AND FINANCIAL NEWSPAPER

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BALTIMORE, JANUARY 19, 1911

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Manufacturers Record.

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ond-class matter.]

BALTIMORE, JANUARY 19, 1911.

A MATTER OF SMELL.

A central bank by any other name is
just as sweet.

TO INSURE PERMANENCY.

A dispatch from Washington states
that, in view of the faint possibility
that a measure for the creation of a
permanent tariff commission can be-
come a law at this session of Congress,
strength will be marshaled behind the
recommendation of the President for
an appropriation of \$500,000 to enable
the present tariff board to prosecute its
inquiry. In the light of the history of
other boards and commissions at Wash-
ington with large appropriations, it is
not unreasonable to suggest that a
tariff board with \$500,000 appropria-
tion will come pretty near becoming a
permanent institution.

NOT RESPONSIBLE.

For the benefit of those whom it may
concern, the MANUFACTURERS RECORD
desires to state that it cannot be re-
sponsible for any communication ad-
dressed to it unless the communication
is published in its own columns. That
any individual addresses a communica-
tion to the MANUFACTURERS RECORD by
no means implies that the MANUFAC-
TURERS RECORD will publish the commu-
nication. Quite recently a communica-
tion was sent us denouncing a criticism
made by another publication. We de-
clined to publish the communication,
and notified the author by return mail.
Subsequently we learned that simul-
taneously with the mailing of the com-
munication he had given it out for local
publication in his own city. Our re-

quest that, for the prevention of any im-
pression that we intended to publish the
communication, the fact that we had de-
clined to do so be made public, has
brought the reply that as "the local
effect has been all that was desired," the
local publisher thinks that "it will do
you more good to let matters rest as
they are than to publish your declina-
tion." We positively refuse to see the
matter in such a light. Without dwell-
ing upon the lack of comprehension of
fundamentals in the suggestion that a
possibility of a false impression in such
an instance is not to be prevented
because "the local effect has been all
that was desired," and without being
uncharitable enough to mention here the
name either of the author of the com-
munication or of his medium of publi-
cation, we refer to this incident as a
protection against others who may be
inclined to resort to similar mistakes.

A PACE-MAKER IN ROAD WORK.

It has been figured out that Texas
will spend this year about \$25,000,000
upon its public highways. That is the
estimate of the Texas Commercial Sec-
retaries' Association, and it is based
upon an aggregate of \$4,015,500 of bonds
issued last year by thirty-four counties,
\$3,235,408 other than the proceeds of
bond sales spent annually upon roads,
\$5,500,000 to be spent upon streets and
roads within city limits, \$5,200,000 of
proposed bond issues now before the
Commissioners and \$10,500,000 of pro-
posed bond issues in process of submis-
sion to the Road Commissioners for
official action. In furtherance of the
campaign for improved highways, in
which it has been very active, the asso-
ciation has published a State map,
showing by counties total road mileage,
mileage of improved highways, money
expended on roads exclusive of bond
issues and county bond issues of 1910.
These were as follows:

County.	Amount.
Ellis.	\$805,000
Galveston.	500,000
Harris.	500,000
Grayson.	250,000
Bowie.	250,000
El Paso.	250,000
Fort Bend.	150,000
Taylor.	150,000
Brown.	100,000
Cooke.	100,000
Dallas.	100,000
Hidalgo.	100,000
Howard.	100,000
Jefferson.	100,000
Chambers.	50,000
Dawson.	50,000
Frost.	50,000
Guadalupe.	50,000
Caldwell.	50,000
Dimmit.	30,000
Maverick.	30,000
Mitchell.	30,000
Stonewall.	30,000
Hood.	25,000
Live Oak.	25,000
Waller.	25,000
Matagorda.	24,000
Zavalla.	20,000
Falls.	18,000
Reeves.	12,000
Hemphill.	10,000
Nueces.	10,000
San Patricio.	10,000
Foard.	1,500

There are in Texas 140,101 miles of
roads of an average width of fifty feet,
equal in area nearly to the land area of
Delaware, and in aggregate nearly six
times the circumference of the earth.
Of the total mileage, 4652 miles are sur-

faced with stone, gravel or like mate-
rial, and a large per cent. of others is
covered well with clay and dirt, and is
well drained. The eleven counties hav-
ing the largest mileage of stone or
gravel-covered roads in good condition
are Tarrant, 200 miles; Dallas, 220;
McLennan, 200; Harris, 196; Bexar,
181; Travis, 140; Grimes, 100; Jack,
100; Limestone, 100; Parker, 100, and
Wilson, 100 miles. The ten counties
making the largest annual expenditures,
excluding bond issues, are Harris, \$250,-
000; Tarrant, \$160,975; Dallas, \$150,-
000; Bexar, \$140,000; McLennan, \$65,-
000; Grayson, \$51,000; El Paso, \$45,-
000; Jefferson, \$45,000; Galveston, \$42,-
000, and Fannin, \$42,000.

Texas is a great-big State, the largest
in the Union. Its area is nearly one-
third of the area of the South. It has
the opportunity to do big things; it is
doing big things. It is preparing to do
bigger things. In the past ten years,
with the density of population in the
South increasing from 29.1 to 34.1, or
by 5 persons to the square mile, the
density of Texas has increased from
11.6 to 14.8, or by 3.2 persons to the
square mile. When Texas has a density
of population equal to that of the
South at present it will have 8,945,000
population. Even then its more than
two hundred and forty counties will not
begin to be crowded. But, if the sev-
eral counties maintain in the meantime
the pace for road-building that has been
set in the past few years, Texas will be
one of the best-equipped States as to
highways in the country. The very act
of equipment will be one of the strong-
est inducements to settlement in the
State from other parts of the country.

COTTON IN COMMERCE.

In the past calendar year the total
value of exports of merchandise from
this country was \$1,864,411,270, an in-
crease of \$136,212,625 in the calendar
year of 1909. Of the total 1910 export
value \$530,156,515, or 28.5 per cent.,
represented raw cotton, and the increase
over 1909 in the value of such exports,
\$68,762,463, was more than half the in-
crease in the value of all exports. The
importance of cotton in our export trade
thus indicated, as it has indicated fre-
quently, is emphasized in a comparison,
in the following table, of the value of
raw cotton exports with the values of
other products in 1909 and 1910:

Products.	1909.	1910.
Breadstuffs.	\$129,191,920	\$95,704,078
Meat and dairy.	131,392,367	107,933,357
Live stock.	16,064,773	9,090,029
Mineral oils.	99,876,190	88,571,319
Cotton.	461,394,052	530,156,515
Total.	\$837,919,302	\$831,455,298

In all of these classes, except cotton,
there was a falling off in values between
1909 and 1910—in breadstuffs, from
\$129,191,920 to \$95,704,078, or by \$33,-
487,842; in meat and dairy products,
from \$131,392,367 to \$107,933,357, or by
\$23,459,010; in cattle, sheep and hogs,
from \$16,064,773 to \$9,090,029, or by
\$6,974,744, and in mineral oils, from
\$99,876,190 to \$88,571,319, or by \$11,-

304,871. The total decrease in these
four classes was from \$376,525,250 to
\$301,298,783, or by \$75,226,467. The in-
crease of \$68,762,463 in the value of cot-
ton exports reduced the decrease in the
five classes to \$6,464,004.

SOUTHERN COAL PRODUCTION.

According to advance estimates of
coal production in 1910, the annual
Southern output of coal has passed be-
yond the 100,000,000-ton mark. In 1907
it reached 94,829,845 tons, but, because
of the financial disturbances of the win-
ter of 1907-1908, there was a decline in
production in 1908 of 12,000,000 tons.
The production in the past three years
by States is shown in the following
table:

States.	1908.	1909.	*1910.
Alabama.	11,694,593	12,703,910	15,000,000
Arkansas.	2,078,357	2,379,109	2,200,000
Georgia.	264,822	211,196	200,000
Kentucky.	10,246,553	10,648,981	14,300,000
Maryland.	4,377,093	4,037,343	4,000,000
Tennessee.	6,199,171	6,328,073	6,500,000
Texas.	1,895,377	1,824,440	1,500,000
Virginia.	4,259,942	4,756,045	5,000,000
West Virginia.	41,897,843	51,446,010	60,000,000
Total.	82,822,551	95,335,098	108,700,000
United States.	415,842,698	459,209,073	480,000,000

*Estimated.

Between 1908 and 1909 the output in
the South increased from 82,800,000 tons
to 95,300,000 tons, or by 12,500,000 tons,
bringing the production to about 500,-
000 tons more than the 1907 output.
But the increase between 1908 and 1909
by 30,900,000 tons in the rest of the
country still left production there about
22,000,000 tons less than in 1907. The
increase in 1910 of production in the
South by more than 10,000,000 tons has
not meant production in the rest of the
country up to the 1907 record there.
The South is now producing more coal
than the whole country produced in
1882.

WHY MEN SUCCEED.

In the case of individuals the work-
ing out of the great law of natural se-
lection is usually largely but an ex-
pression of one's preparedness to seize
an opportunity. This preparedness im-
plies doing with one's might the job at
hand, initiative and self-confidence and
alertness to the promise in an expan-
sion of energies. One of the most
notable instances of the kind is the
selection of Mr. James A. Farrell by
the finance committee of the United
States Steel Corporation as the next
president of that organization of world-
wide power and importance. Thirty-
two years ago Mr. Farrell, a boy of 16
years, was a laborer in a wire mill at
New Haven, Conn. He worked there at
manual labor for 9 years, and then,
moved to that city, where he con-
tinued to advance in experience and
responsibility, and within a few years,
upon the organization of the original
American Steel & Wire Co., he be-
came the general sales manager of
its export trade, with headquarters in
New York, and when the United States
Steel Products Export Co., since become
the United States Steel Products Co.,
was formed in 1903 he became its presi-
dent, and in that capacity has been

Classified Opportunities

AGENCIES WANTED

WE are prepared to represent manufacturers as distributors in the Southern States; facilities for storing and location for distribution unexcelled. Write us. W. L. Lamar & Co., 77 S. Broad St., Atlanta, Ga.

WANTED—Sales agency for all lines pertaining to builders' material; East Tennessee as territory; can furnish satisfactory references to interested concern. Address Daniel Briscoe, Jr., Knoxville, Tenn.

TO REPRESENT on commission basis manufacturers of mine, furnace and mill machinery and equipment; Birmingham district, Alabama, as territory. Address No. 728, care Manufacturers Record.

WANTED—To communicate with a manufacturer or wholesale firm who desires a bonded broker or distributing agent for Kansas and Oklahoma; has good warehouse facilities. Address Box 868, Wichita, Kansas.

AGENTS AND SALESMEN WANTED

WANTED—Good reliable men to handle our line of vehicle rims as a side line on commission. We also want them to get in touch with concerns wanting special bending work. May Bending Works, Steubenville, Ohio.

WANTED—Traveling salesmen in different sections of the country for all or part of time, to sell the mill, manufacturing and hardware and oil companies; staple lines; goods well known and advertised; commission or salary; excellent side line; good salesmen can average \$100 per week. Address The Alcatraz Company, Richmond, Va.

WANTED—Real salesmen acquainted with building and contract work to handle concrete mixers. The American is a batch mixer giving a perfect mix either wet or dry. It is sold under a liberal commission arrangement without requiring any financial investment by the agent. A good seller in other sections and should prove attractive in the South with pushing. Address Cargill Mfg. Co., 567 Buttrick Ave., Columbus, Ohio.

SOUTHERN AGENCY.—Wanted—Agent for Southern territory by a corporation manufacturing structural and railroad paints and specialties; high-grade proposition on commission basis, with exclusive territory and considerable trade already established, to right party. Address No. 731, care Manufacturers Record.

WANTED—First-class experienced fertilizer salesman, acquainted with the Alabama trade. Address, stating age, experience and salary expected, Box 83, Montgomery, Ala.

A MANUFACTURING concern located in the South desires the services of a high-class practical sales manager who is also familiar with factory production and management; would prefer party who could become financially interested, but this is not essential; thorough acquaintance with cotton mills in Carolinas and Georgia necessary. Address No. 724, care Manufacturers Record.

WANTED—By well-known belting manufacturing concern, salesman in a Southern territory; must have experience; compensation dependent entirely on results, with fair guarantee to start. Address No. 732, care Manufacturers Record.

SITUATIONS WANTED

CIVIL ENGINEER, 15 years' experience, covering difficult U. S. Government survey work, general concrete construction and municipal work, including street paving, design and construction of sewerage systems; good executive ability and can handle any kind of construction work; best of references, among them consulting engineers of note. Address No. 734, care Manufacturers Record.

MANAGER of Southern lumber company now going out on business desires new connection; 10 years' experience in export, wholesale and retail yellow pine, cypress and hardwoods; desire position with manufacturer or in any enterprise where good address, integrity and judgment in handling men or affairs is demanded; am 35 years old, married and settled; efficient in office, good buyer or salesman, experienced financier; best references. Address No. 726, care Manufacturers Record.

A COMPETENT superintendent of construction, capable of handling any kind of construction work, is open for a position; have had 20 years' experience and can furnish good references. Address No. 723, care Manufacturers Record.

WANTED—Position by competent mechanical and electrical engineer, age 36, with 15 years of practical experience in the erection and maintenance of steam, gas and electrical machinery, and with both A. C. and D. C. currents and line construction; desires to communicate with any Southern firm in need of a master mechanic or chief engineer; will accept position at nominal salary to start with, with increase at a fixed time contingent upon results. Address, with full particulars, No. 722, care Manufacturers Record.

PRACTICAL, scientific, experienced mining man, understands managing, operating, developing of mines, minerals, metals, properties, open for a position. L. Sherard, Evergreen, Ala.

Rate 20 cents per line per insertion. Minimum space accepted, four lines. Maximum space accepted, 24 lines. Allow seven words per line. Terms: Invariably cash with order; check, postoffice or express order or stamps accepted. No display type used. Questionable or undesirable advertisements will not be accepted. The assistance of our readers in excluding undesirable advertisements is requested. We reserve the right to refuse any advertisement. No patent medicine, whiskey or mining stock advertisements accepted. Rate for special contracts covering space used as desired within one year, as follows: 100 lines, 18c. per line; 300 lines 16c. per line; 500 lines or more, 15c. per line.

YOUNG ENGINEER, 25, desires position: 6 years' experience in land surveying, State roads, municipal work, dams and water-works; experienced as inspector of highway and sewer construction; good references; location immaterial. Address No. 721, care Manufacturers Record.

MANAGER WANTED

MANAGERS WANTED for several wood-working and machine and metal-working plants; must be of proven ability and in position to take small amount of stock. McAlister Commercial Club, McAlister, Okla.

UNUSUAL OPPORTUNITY.—Manager wanted to take charge of factory end of largest plant in the South manufacturing sash, doors, blinds, interior finish and hardwood work. The right man must be able to take some stock so as to be interested in business. Woodward Lumber Co., Atlanta, Ga.

A MANUFACTURING CONCERN about to be incorporated under the laws of Texas, with a capital stock of \$50,000, requires the services of a first-class mechanical engineer with several years of practical experience in the construction of gasoline motors adapted for automobiles and aeroplanes, to take charge of aeroplane factory; we own our factory; \$25,000 already subscribed; one aeroplane completed and paid for; success assured; applicants must be able to furnish diplomas and references and to invest \$5000 or more. Address A. Wendling, 615 Blinz Bldg., Houston, Tex.

COMMERCIAL SECRETARY WANTED

WANTED—A competent man as commercial secretary for Norton Board of Trade. Address, with reference, Chas. Hall, Jr., Norton, Va.

EDUCATIONAL

RENSSELAER POLYTECHNIC INSTITUTE, TROY, N. Y.—Courses in Civil, Mechanical and Electrical engineering, and General Science, leading to the degrees of Civil Engineer (C.E.), Mechanical Engineer (M.E.), Electrical Engineer (E.E.), and Bachelor of Science (B.S.). Special courses in engineering and science. Splendidly equipped new engineering laboratories. Send for catalogues to Registrar.

BANKS

THE CITIZENS' BANK OF NORFOLK, Va., capital \$300,000, surplus \$375,000, solicits accounts of banks, firms, corporations and individuals.

COMMERCIAL STATE BANK, Birmingham, Ala. State depository. Prompt attention to Alabama collections.

THE PALMETTO NATIONAL BANK, Columbia, S. C., capital \$250,000, solicits accounts of banks, firms, corporations and individuals, either commercial or savings accounts.

BUSINESS OPPORTUNITIES

FOR SALE—Up-to-date stock of hardware, implements and paints; invoice \$20,000; can reduce same; doing \$60,000 business yearly; four floors; good business; best town in North Alabama, about 20,000; seven large cotton mills and various industries; large territory for wholesale and retail; fine climate; rare chance; in business 30 years; wish to retire. M. A. Collins, Huntsville, Ala.

WANTED—Party to invest \$20,000 and assist in active management of a 50-ton ice factory with coal and wood business in connection; plant located in a Southern rapidly growing railroad center of 10,000, is in a prosperous condition and paying 20 per cent. on investment. Opportunity for enlargement is ripe, but principal owner cannot undertake additional work on account of advancing years. Will pay salary adequate to ability. Unless you mean business and have money and are competent for active assistance don't reply. Knowledge of this particular business is not requisite. Address No. 719, care Manufacturers Record.

I HAVE about 10,000 acres of fertile black loam agricultural land in Southern Louisiana to drain and market, which will yield an approximate profit of 800 per cent., and am open to proposition from men with capital. Address No. 735, care Manufacturers Record.

FOR SALE—Low price, 4½-year contract for output of boards from yellow-pine export mill in Florida: 5000 to 6000 feet per day; new dry kiln, boiler, etc.; lease on planing-mill machinery, sheds, side and tram tracks; a money-maker on small investment; good reason for selling. "Excellent." P. O. Box 365, Montgomery, Ala.

FOR SALE—An interest in concrete and cement tile device; eliminates use of nails in framework construction; adds \$15 value to each 1000 feet lumber; a big little thing. Address R. L. McCready, Allegheny, Pa.

WANTED—Party with \$25,000 or \$30,000 to join with local capital in the manufacturing business. Address No. 733, care Manufacturers Record.

WE BUY everything in old scrap material and pay highest market prices; no quantity too large or too small. H. Kander & Co., Bowling Green, Ohio.

EXCEPTIONAL OPPORTUNITY.—FOR SALE—One-quarter interest in 5000 acres of accessible hardwood timber in Western North Carolina can be secured for \$25,000; now being profitably operated by practical men owning balance interest. Principals only need apply, with references. Address No. 727, care Manufacturers Record.

ONE-HALF of best water-power in Eastern N. C. for sale; terms, \$50,000; near town of 10,000; can sell all electric-power that may be developed. Wilson Light & Power Co., Wilson, N. C.

FOR EXCHANGE—12 forties cut-over, Northern Wisconsin; minerals reserved; that's common in the iron belt; 37 acre; want farm equal value, Delaware, Maryland, Virginia; describe fully; give legal number. A. M. Kauffman, Lockridge, Ia.

MINING EXPERT wants financial backing for a proposition that will yield \$100,000,000 or more; no possible loss. Sherard, Evergreen, Ala.

WE HAVE a plant—buildings, grounds, boiler and engine—an ideal location for working excelsior with mattress factory, solid bored columns or most any kind of wood-working business; will sell cheap. Address Box 29, Columbus, Miss.

WANTED—Mechanical engineer by a \$170,000 corporation; applicant must invest at least \$5000, and if references are right he will be made general manager and given \$5000 of additional stock. None of our stock has been given away or sold below par. Applicant must be a good draftsman and know steam engines. Address N. H. Mottinger, President, Greensburg, Pa.

FOR SALE—\$5000 general merchandise; clean stock; best trade; excellent schools and churches; light expenses; two-story brick; cheap rent; 29 years in, want to retire. Address Box 33, Center, Ala.

BROKERAGE ACCOUNTS WANTED.—All lines solicited; reference, The H. T. Hackney Company, wholesale. Address D. C. Moses, Jellico, Tenn.

SOMEONE to finance a water, light and ice proposition in a growing town of 4000; 30-year exclusive franchise; one of the best propositions in the South. Don't answer unless you mean business. Address No. 717, care Manufacturers Record.

FOR SALE—A dry goods, shoe and clothing business in a town of 10,000 people. A chance for you to get in business in a good Southern town. A store, warehouse and 156 acres of land in a small railroad town. There is money in this. Box 243, Lagrange, Georgia.

FOR SALE OR EXCHANGE for real estate, coal or timber land, a double-equipment three-phase light and power plant in growing town in beautiful location in West Virginia. Address J. Aml Martin, Morgantown, West Virginia.

\$20,000 REAL ESTATE MORTGAGES, 1 to 5 years, first liens only, net you 8 to 10%. Your interest and principal collected and remitted in New York exchange without charge. Highest references and information furnished on request. Auction Realty Co., Oklahoma City, Okla.

WANTED—Party to take half interest or capable of interesting capital in best summer, winter and transient resort proposition in all the South. Address Box 296, Tullahoma, Tenn.

INVEST a little money now in a few shares of good-paying stock in a sound, well-established large electric corporation in the most prosperous section of Texas; a character of investment that is the coming business of the age, which will be a fortune in old age to rely upon. You can buy now, paying for them in monthly installments. You won't miss the money, and will be providing for old age and your family in something better than life insurance, because this will grow. Interstate Engineering & Construction Co., Terrell, Texas.

WANTED—Partner with \$5000 to \$10,000 to invest in an established brick-manufacturing business; one of the best-equipped plants in the country; daily capacity, 30,000; ready sale for output. Address W. F. Reaves, New Albany, Miss.

A WELL-EQUIPPED machine shop and foundry desires to add to its line of manufacture either by consolidating with another similar company or by purchasing or manufacturing on royalty some articles of iron or steel which have ready sale. Address No. 713, care Manufacturers Record.

HOTELS

NEW EXCHANGE HOTEL, block of Union depot and postoffice, Waco, Texas; remodeled and refurnished; every provision for guests' comfort; best service. A. D. Adams, Prop'r.

TYPEWRITERS

TYPEWRITERS.—Real Remingtons, \$12.00; Calligraphs, \$6.00; Hammonds, Denismores, \$10.00; Smith Premiers, \$15.00; Oliverts, Underwoods, \$25.00; 15 days' trial and year's guarantee. Harison Typewriter Exchange, Dept. M. R., No. 217 West 125th St., N. Y. City.

ENTERPRISE EXCHANGE, INC., 609 E. Baltimore St., Baltimore, Md.; remanufactured typewriters, all makes; three days' examination allowed; catalogue upon request; full line of ribbons, carbons and papers.

TYPEWRITER BARGAINS.—Blick, \$10; Smith Premier, \$12.50; No. 6 Remington, \$25; Underwood, \$35; L. C. Smith, \$33, etc. Send for price-lists. Nicholson Typewriter Exchange, 14 St. Paul St., Baltimore, Md.

MONEY WANTED

CAN USE \$50,000 for five or ten years at 5 per cent.; will give first mortgage on farm property at 40 per cent. valuation. B. E. Norvell, Bay City, Texas.

LOCATIONS

WANT to correspond with party or parties contemplating locating any kind of manufacturing plant in the South; ideal location; prompt service and cheap rates both rail or water; unsurpassed climate; will aid financially any sound and paying manufacturing enterprise willing to locate here. John H. Kuck, Wilmington, N. C.

WHY PALMETTO LEADS.—The 800,000 boxes of fruits and early vegetables attests the superiority of soil, climate and irrigation necessary to produce such crops. The ease with which such crops are handled by rail and water make it an ideal place for fruit and vegetable growing. The Manatee River, Terra Ceia and Tampa bays furnish ideal salt-water fishing, boating and bathing. For further information address The Manatee River Board of Trade, Palmetto, Florida.

FACTORY SITES

FACTORY SITE CHEAP near the Union Steamship Company's terminal property. The factory site fronts 1040 feet on the Norfolk & Western Railroad, with a street frontage on Bowdens Ferry road and 55th street of 150 feet, with an area of 98 lots of the usual size. This property is within 12 minutes' walk of the property recently purchased by the Old Dominion Steamship Company to be used jointly by all the steamship lines entering Norfolk. Price \$12,000. This price is subject to change without notice. Bellamy & Hough, Inc., 81 Plume St., General Agents, Norfolk, Va.

DESIRE to correspond with dissatisfied manufacturers looking for more economical locations, nearness to market or proximity to raw material. Have several exceptionally fine things to offer throughout the Central West and Southern States. These are thriving, up-to-date towns, having all the requirements and advantages for successful manufacturing sites, and among friendly people who will not only welcome them, but aid them in taking care of an expanding business. The information is free and no charge made for this assistance. Address E. J. Schaur, 115 Dearborn St., Chicago, Illinois.

FOR SALE—MANUFACTURING SITE, BIRMINGHAM, ALABAMA.—I offer for sale a manufacturing site of five acres, with good buildings and exceptional facilities in the way of railroad sidings, etc.; right in the heart of Birmingham's largest suburb, within the limits of Birmingham; especially attractive to large users of pig-iron and steel. Present owners and occupants are winding up their business here and this site is offered at a bargain. Jerome Tucker, Birmingham, Ala., 207 21st St. Phone 378.

FACTORY SITE, COLUMBUS, OHIO.—One of the best in the city; 33 acres, or any part thereof, on centrally-located switch, in a large German settlement. Columbus is one of the best towns for factories in the United States, and its railroad facilities cannot be excelled. The laboring people are largely Germans and men who have moved in from the country; practically no foreign element. All Columbus industries have grown to be large institutions. Our banks furnish any amount of capital that is required to finance, enlarge and develop business. The Chamber of Commerce is alive to the interests of its home industries. Last year it gave one of the most elaborate and successful industrial expositions that has ever been held in the United States. If you contemplate a location, let us hear from you. C. A. Thomas & Co., Brunson Bldg., Columbus, Ohio.

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ond-class matter.]

BALTIMORE, JANUARY 19, 1911.

A MATTER OF SMELL.

A central bank by any other name is
just as sweet.

TO INSURE PERMANENCY.

A dispatch from Washington states
that, in view of the faint possibility
that a measure for the creation of a
permanent tariff commission can be-
come a law at this session of Congress,
strength will be marshaled behind the
recommendation of the President for
an appropriation of \$500,000 to enable
the present tariff board to prosecute its
inquiry. In the light of the history of
other boards and commissions at Wash-
ington with large appropriations, it is
not unreasonable to suggest that a
tariff board with \$500,000 appropriation
will come pretty near becoming a
permanent institution.

NOT RESPONSIBLE.

For the benefit of those whom it may
concern, the MANUFACTURERS RECORD
desires to state that it cannot be re-
sponsible for any communication ad-
dressed to it unless the communication
is published in its own columns. That
any individual addresses a communica-
tion to the MANUFACTURERS RECORD by
no means implies that the MANUFACTURERS
RECORD will publish the communica-
tion. Quite recently a communica-
tion was sent us denouncing a criticism
made by another publication. We de-
clined to publish the communication,
and notified the author by return mail.
Subsequently we learned that simulta-
neously with the mailing of the commu-
nication he had given it out for local
publication in his own city. Our re-

quest that, for the prevention of any im-
pression that we intended to publish the
communication, the fact that we had de-
clined to do so be made public, has
brought the reply that as "the local
effect has been all that was desired," the
local publisher thinks that "it will do
you more good to let matters rest as
they are than to publish your declina-
tion." We positively refuse to see the
matter in such a light. Without dwell-
ing upon the lack of comprehension of
fundamentals in the suggestion that a
possibility of a false impression in such
an instance is not to be prevented
because "the local effect has been all
that was desired," and without being
uncharitable enough to mention here the
name either of the author of the com-
munication or of his medium of publi-
cation, we refer to this incident as a
protection against others who may be
inclined to resort to similar mistakes.

A PACE-MAKER IN ROAD WORK.

It has been figured out that Texas
will spend this year about \$25,000,000
upon its public highways. That is the
estimate of the Texas Commercial Sec-
retaries' Association, and it is based
upon an aggregate of \$4,015,500 of bonds
issued last year by thirty-four counties,
\$3,235,408 other than the proceeds of
bond sales spent annually upon roads,
\$5,500,000 to be spent upon streets and
roads within city limits, \$5,200,000 of
proposed bond issues now before the
Commissioners and \$10,500,000 of pro-
posed bond issues in process of submis-
sion to the Road Commissioners for
official action. In furtherance of the
campaign for improved highways, in
which it has been very active, the asso-
ciation has published a State map,
showing by counties total road mileage,
mileage of improved highways, money
expended on roads exclusive of bond
issues and county bond issues of 1910.
These were as follows:

County.	Amount.
Ellis.....	\$905,000
Galveston.....	500,000
Harris.....	500,000
Grayson.....	250,000
Bowie.....	250,000
El Paso.....	250,000
Fort Bend.....	150,000
Taylor.....	150,000
Brown.....	100,000
Cooke.....	100,000
Dallas.....	100,000
Hidalgo.....	100,000
Howard.....	100,000
Jefferson.....	100,000
Chambers.....	60,000
Dawson.....	50,000
Freestone.....	50,000
Guadalupe.....	50,000
Caldwell.....	50,000
Dimmit.....	30,000
Maverick.....	30,000
Mitchell.....	30,000
Stonewall.....	30,000
Hood.....	25,000
Live Oak.....	25,000
Waller.....	25,000
Matagorda.....	24,000
Zavalla.....	20,000
Falls.....	18,000
Reeves.....	12,000
Levell.....	10,000
Memphis.....	10,000
Sucess.....	10,000
San Patricio.....	10,000
Foard.....	1,500

There are in Texas 140,101 miles of
roads of an average width of fifty feet,
equal in area nearly to the land area of
Delaware, and in aggregate nearly six
times the circumference of the earth.
Of the total mileage, 4652 miles are sur-

faced with stone, gravel or like mate-
rial, and a large per cent. of others is
covered well with clay and dirt, and is
well drained. The eleven counties hav-
ing the largest mileage of stone or
gravel-covered roads in good condition
are Tarrant, 200 miles; Dallas, 220;
McLennan, 200; Harris, 196; Bexar,
181; Travis, 140; Grimes, 100; Jack,
100; Limestone, 100; Parker, 100, and
Wilson, 100 miles. The ten counties
making the largest annual expenditures,
excluding bond issues, are Harris, \$250,-
000; Tarrant, \$160,975; Dallas, \$150,-
000; Bexar, \$140,000; McLennan, \$65,-
000; Grayson, \$51,000; El Paso, \$45,-
000; Jefferson, \$45,000; Galveston, \$42,-
000, and Fannin, \$42,000.

Texas is a great-big State, the largest
in the Union. Its area is nearly one-
third of the area of the South. It has
the opportunity to do big things; it is
doing big things. It is preparing to do
bigger things. In the past ten years,
with the density of population in the
South increasing from 29.1 to 34.1, or
by 5 persons to the square mile, the
density of Texas has increased from
11.6 to 14.8, or by 3.2 persons to the
square mile. When Texas has a density
of population equal to that of the
South at present it will have 8,945,000
population. Even then its more than
two hundred and forty counties will not
begin to be crowded. But, if the sev-
eral counties maintain in the meantime
the pace for road-building that has been
set in the past few years, Texas will be
one of the best-equipped States as to
highways in the country. The very act
of equipment will be one of the strong-
est inducements to settlement in the
State from other parts of the country.

COTTON IN COMMERCE.

In the past calendar year the total
value of exports of merchandise from
this country was \$1,864,411,270, an in-
crease of \$136,212,625 in the calendar
year of 1909. Of the total 1910 export
value \$530,156,515, or 28.5 per cent.,
represented raw cotton, and the increase
over 1909 in the value of such exports,
\$68,762,463, was more than half the in-
crease in the value of all exports. The
importance of cotton in our export trade
thus indicated, as it has indicated fre-
quently, is emphasized in a comparison,
in the following table, of the value of
raw cotton exports with the values of
other products in 1909 and 1910:

Products.	1909.	1910.
Breadstuffs.....	\$129,191,920	\$95,704,978
Meat and dairy.....	131,392,367	107,933,357
Live stock.....	16,064,773	9,080,029
Mineral oils.....	99,876,190	88,571,319
Cotton.....	461,394,052	530,156,515
Total.....	\$837,919,302	\$831,455,238

In all of these classes, except cotton,
there was a falling off in values between
1909 and 1910—in breadstuffs, from
\$129,191,920 to \$95,704,078, or by \$33,-
487,842; in meat and dairy products,
from \$131,392,367 to \$107,933,357, or by
\$23,459,010; in cattle, sheep and hogs,
from \$16,064,773 to \$9,080,029, or by
\$6,974,744, and in mineral oils, from
\$99,876,190 to \$88,571,319, or by \$11,-

304,871. The total decrease in these
four classes was from \$376,525,250 to
\$301,298,783, or by \$75,226,467. The in-
crease of \$68,762,463 in the value of cot-
ton exports reduced the decrease in the
five classes to \$6,464,004.

SOUTHERN COAL PRODUCTION.

According to advance estimates of
coal production in 1910, the annual
Southern output of coal has passed be-
yond the 100,000,000-ton mark. In 1907
it reached 94,829,845 tons, but, because
of the financial disturbances of the win-
ter of 1907-1908, there was a decline in
production in 1908 of 12,000,000 tons.
The production in the past three years
by States is shown in the following
table:

States.	1908.	1909.	*1910.
Alabama.....	11,694,593	13,703,910	15,000,000
Arkansas.....	2,078,357	2,379,100	2,200,000
Georgia.....	264,822	211,196	200,000
Kentucky.....	10,246,553	10,648,981	14,300,000
Maryland.....	4,377,093	4,097,341	4,000,000
Tennessee.....	6,199,171	6,325,073	6,500,000
Texas.....	1,895,377	1,824,449	1,500,000
Virginia.....	4,259,042	4,756,045	5,000,000
West Virginia.....	41,897,843	51,446,010	60,000,000
Total.....	82,822,851	95,335,098	108,700,000
United States.....	415,842,698	459,209,073	480,000,000

*Estimated.

Between 1908 and 1909 the output in
the South increased from 82,800,000 tons
to 95,300,000 tons, or by 12,500,000 tons,
bringing the production to about 500,-
000 tons more than the 1907 output.
But the increase between 1908 and 1909
by 30,900,000 tons in the rest of the
country still left production there about
22,000,000 tons less than in 1907. The
increase in 1910 of production in the
South by more than 10,000,000 tons has
not meant production in the rest of the
country up to the 1907 record there.
The South is now producing more coal
than the whole country produced in
1882.

WHY MEN SUCCEED.

In the case of individuals the work-
ing out of the great law of natural se-
lection is usually largely but an ex-
pression of one's preparedness to seize
an opportunity. This preparedness im-
plies doing with one's might the job at
hand, initiative and self-confidence and
alertness to the promise in an expan-
sion of energies. One of the most
notable instances of the kind is the
selection of Mr. James A. Farrell by
the finance committee of the United
States Steel Corporation as the next
president of that organization of world-
wide power and importance. Thirty-
two years ago Mr. Farrell, a boy of 16
years, was a laborer in a wire mill at
New Haven, Conn. He worked there at
manual labor for 9 years, and then,
moved to that city, where he con-
tinued to advance in experience and
responsibility, and within a few years,
upon the organization of the original
American Steel & Wire Co., he be-
came the general sales manager of
its export trade, with headquarters in
New York, and when the United States
Steel Products Export Co., since become
the United States Steel Products Co.,
was formed in 1903 he became its presi-
dent, and in that capacity has been

potent in enlarging the activities of the Steel Corporation abroad, the Steel Products Company now being directly represented at 55 trade centers in foreign lands and our export trade in iron and steel now amounting to \$200,000,000 annually. He has been correctly described as a great salesman. He knows intimately the iron and steel industry of the world and is acquainted with the buyers in the markets of the world. He is familiar with conditions in South America and the Orient, as well as in Europe. He is a great believer in the South and enthusiastic about its iron and steel future. In announcing the selection of Mr. Farrell, Chairman E. H. Gary of the Steel Corporation referred to the capacity of Mr. Farrell as head of the Steel Products Company, and to his experience of 25 years in the manufacturing and commercial branches of the iron and steel industry as qualifying him for his new position. The career of Mr. Farrell proves that his selection was a perfectly natural one.

Another instance, but in another line, is the election of Mr. George M. Shriver to the position of second vice-president of the Baltimore & Ohio Railroad Co., in charge of the accounting department, together with other duties. In 1887 Mr. Shriver was a clerk in the railroad's employ. For a few months subsequently he was with the United States Express Co. and secretary to Mr. Charles F. Mayer, then president of the Consolidation Coal Co. When Mr. Mayer became president of the Baltimore & Ohio Railroad Co. Mr. Shriver continued to be his secretary, and since then he has been uninterruptedly associated with the business of the president's office, serving successfully with Presidents Cowen, Loree, Murray and Willard, and for several years filling the important post of assistant to the president.

Neither Mr. Farrell nor Mr. Shriver have yet reached the age of 50 years. They are types of the men who succeed because of their readiness to seize opportunity, if not also because of their ability to make an opportunity where other men would do nothing. What they have accomplished is within the range of young men whose chances are no greater today than theirs were 25 or 30 years ago.

TRESPASSING ON RAILROADS.

In the year 1909, the last for which Interstate Commerce Commission statistics are available, there were nearly five thousand persons killed on railroads in the United States who were trespassers on the right of way of the transportation companies. The total number of persons killed on the various lines was 8722; therefore, the number of fatal accidents to trespassers was considerably more than 50 per cent. of the entire number of railroad fatalities. In addition, there were 5759 trespassers injured.

It is not surprising, in view of these facts, that the Pennsylvania Railroad Co., which operates one of the largest systems in the country, should use active efforts to stop the practice of trespassing upon its right of way and other property. It has recently made public interesting figures concerning accidents to trespassers on its lines during the last eleven years, showing from 1900 to 1907, inclusive, an alarming growth in the number of fatal accidents, for, while there were 518 trespassers killed on the Pennsylvania system in 1900, there were 916 killed in 1907, or very nearly 400 more, almost 77 per cent.

In that year there were 5612 trespassers killed on the railroads in the United States, so that the number killed on the Pennsylvania amounted to about 16 1/4 per cent. of the total.

But, as a result of the campaign which the company has made against trespassers, the number of fatal accidents to such persons has been reduced gradually from the high-water mark of 1907 to 585 in 1910. However, as figures for the entire country since 1909 have not been compiled, we may compare the fatal accidents to trespassers on the Pennsylvania for that year (633 in number) with the total number of trespassers killed in the United States (4944), demonstrating that the first figures represent only about 12 3/4 per cent. of the latter, which is a large drop from the 16 1/4 per cent. of two years previous. It may be also noted that the number of trespassers injured on the road (794) was reached in 1905, was equaled in 1906 and the lowest figure (582) was reached in 1910. The company says that there has been a reduction of 36 per cent. in the number of trespassers killed on its lines during the last four years. This is a highly creditable showing.

The Pennsylvania, it is further stated, in endeavoring to prevent trespassing has invited co-operation from public officers, has posted its right of way with warning signs, has published the facts about the dangers of walking on railroads or otherwise trespassing, and in as many ways as could be thought of has urged upon the people generally the importance of stopping the practice. This year the campaign is to be continued with greater vigor. In this connection an official of the railroad is quoted thus:

Railroads may be penalized by payments in money, but the individual's or citizen's penalty is the supreme one of life, which, manifestly, is the highest duty of the State to protect by such legislation as will tend to prevent trespassing on railroads. Probably the public is indifferent because each individual thinks he will not be hurt, but among the other moral awakenings that are taking place perhaps the meaning of this great sacrifice of life can be brought home.

Undoubtedly the Pennsylvania and such other railroads as are making efforts to break up the trespassing habit deserve the approval and support of the people in these endeavors. Each individual can give the roads practical encouragement by refraining from the practice, and by discouraging it in others as well by forbidding it among children or other persons under their guidance or control.

HOGS AND THE BOLL-WEEVIL.

In marketing a carload of hogs at Atlanta at a profit of three cents a pound, W. J. Oliver, who has a 3000-acre farm at Shellman, Ga., said:

Raise hogs and corn, and forget the boll-weevil.

In explanation of his intention to devote more time to hogs and less time to cotton, if the boll-weevil is half as bad as it is painted, Mr. Oliver gave the *Constitution* some explanation of his methods of farming that result in sugar and coffee being about the only things that his tenants have to buy to eat. He permits no man who lives on the farm to buy anything that can be raised on the farm. He himself raises, in addition to cotton and corn, wheat, oats, rye, peanuts, sugar-cane, peas and other crops. He has been feeding hogs for sometime, and always has a year's supply of corn ahead. His method of feeding is thus described by the *Constitution*:

He so arranges his crops, he says, that he

gathers nothing the pigs eat save the corn, which is fed to them after they have been penned for fattening. The feed they get for the remainder of the time he keeps them they gather for themselves just where it grew. Mr. Oliver states that he has something over 600 acres of his 3000-acre farm fenced. This he divides into five fields, planting two in oats, one in rye, another in corn and peas, and the other in groundpeas. In March he turns his hogs into one of the oat fields and allows them to remain until they have grazed the field thoroughly. He then turns the hogs into the other oat field, sowing the first in an early variety of peas. By the time the second field has been thoroughly grazed he puts the hogs into the field of peas, and later into the rye patch, the rye having ripened by this time. Later he gathers his corn, between the rows of which peas have been planted, and turns the hogs loose to gather the peas. In December he makes the last shift, this time putting the hogs into the field planted with peanuts. Here they are allowed to remain until the peanuts are gone, after which they are penned and fed entirely on corn for six or eight weeks, then they are ready for the market.

In other parts of the South the visitation of the boll-weevil has been quite influential in directing the attention of cotton-growers to other crops, and thus has speeded the tendency to a return to diversification of crops that had its great impulse in recent years in the starvation prices that cotton brought in the last decade of the nineteenth century. Mr. Oliver has not waited for the appearance of the boll-weevil, but has applied to his farming operations the wisdom that works for the well-balanced agriculture of which the South is so capable, and without which the full potentialities of the South cannot be realized.

MAY WELL BE REMEMBERED.

Commenting upon a statement of the *Buffalo Commercial* that it has learned positively that the battleship "Maine" was not blown up by a Spanish torpedo, but by the explosion of one of its own ammunition magazines, the *Boston Watchman* says:

If it had been surely known that the Maine was destroyed by an internal explosion February 15, 1908, war would not have been declared against Spain, Cuba would not have been free, Porto Rico and the Philippines would not belong to the United States, the American Navy would not be the second in power in the world, the international influence of the United States would still be small, Roosevelt would not have been President, imperialism would not have been an issue, the movement for legality and honesty in corporations would not have been inaugurated, the \$500,000,000 expended on the Philippines would have been saved, the American battleships would not have made a voyage around the world, and American diplomacy would not have saved the Chinese Empire from dismemberment. If all these things have resulted from a mistake, we shall have more cause than ever to "Remember the Maine."

The *Watchman*, while reading history, apparently, by its superlatives, and while taking much for granted in thinking that the end furthered by the blowing up the "Maine" would not have been reached in other ways had that not happened, fails to make itself very clear as to which of the sequences of the war against Spain it puts on the side of national assets and which on the side of national liabilities. In other words, it fails to note which have been blessings and which have been curses. If the "Maine" had not improperly been sent to the harbor of Havana and kept there against the warning of a United States official in Cuba, it would not have been blown up. If it had not been blown up we would not have had that pretext for an unholy war, costing many thousands of lives and in the end billions of dollars. The people of the United States would not have been forced to become a party to politico-

financial rottenness which brought about the unholy war. We would not have been loaded with the Philippine Islands. We would not have been driven into the building of a great navy, involving hundreds of millions in cost and still more in maintenance. We would not have been setting the world an example of a war-like nation. The international influence of the United States, through the development of commercial interests, would have been equally as great as through the development of its power for war, for Europe has been more afraid of the domination of the world's commerce by the peaceful arts of trade than by our armies and navies; and if it had so happened that we had had no destruction of the "Maine," and, therefore, no Roosevelt for President, we would have had the enforcement of laws and the development of legality and honesty in corporation management without the wreck and ruin wrought by the "big stick." We would then have been saved from the development throughout the country of class hatred and of the bitterness which now prevails, the future of which is beyond man's power to discern. The business interests of the country would have been prosperous to a greater extent than they have been. Men would have been better employed, and the country as a whole would have been infinitely blessed, instead of having had to bear the burden of the curses which have come upon it, all apparently harking back to the destruction of the "Maine," sent on its mission as a part of a campaign resulting in the inauguration of an unholy war with all its fearful curse of death, billions of money wasted, the burdens of taxation added to the people and the increased cost of living and the increased cost of production of everything by reason of these taxes. Surely we indeed have cause to "Remember the Maine," and to remember it in connection with one of the dark blots upon American civilization.

CHARGING FOR BANK ACCOUNTS.

One of the oldest banks in Baltimore recently adopted a rule to make a charge against such depositors as have considerable business with the institution and yet keep a comparatively small average balance therein. While a minimum deposit was decided upon, the rule is not to be inflexibly applied thereto, the relative activity of an account being considered. Of course, the reason for this action by the directors was the unprofitableness of some accounts.

Years ago there used to be more formality in opening an account with a bank than is now customary; an introduction was expected and usually required. The business standing of the would-be depositor was a matter of consideration as well as his general reputation. But nowadays, amid the financial rivalry familiar to us, banks are mostly inclined to welcome a depositor with little or no criticism or inquiry, and if he does not overdraw his account he continues to maintain indefinitely his banking connection, even if his balance averages a sum that is of no profit to the institution, the idea being that he may become a valued customer some day, or that he may cause some of his friends to be depositors, and that they may prove more worthy.

Not such a long time ago some of the banks seemed to engage in a race to increase the number of their depositors without much regard for the amount of

their deposits. Exhibits of large gains in the number of customers were published by some institutions as commendable results of enterprise, not to say of financial acumen. Naturally, some folks made deposits who really did not require banking accommodations, and doubtless others who needed the facilities of a bank but who either could not or would not maintain a reasonable deposit, discovered, to their gratification, an opportunity to get something for nothing at the expense of a financial concern that, presumably, was rich and prosperous, and could well afford to be generous. Now some banks are doubtless regretting this liberality. Hence the disposition which is being manifested in various places to impose charges upon unprofitable accounts.

It is to be expected that some objections will be raised to this growing tendency of financial institutions to protect themselves against loss in the matter of carrying small accounts, but fair-minded people will realize that banking facilities are worth something to them, and that if their balances on deposit average so low that the banks cannot make any money by loans therefrom, it is only right that they should be impelled to make up the deficiency. The MANUFACTURERS RECORD several years ago, to illustrate some such point, recalled the story, which will bear repetition, of an old Dutch farmer in South Africa who declined to deposit his money in a bank because it made no charge for taking care of it. He did not even think of the other valuable facilities tendered by the institution, but argued that the safeguarding of his money was worth something to him, and he could not see how a bank could take care of it for nothing and be honest to him in the end. There are many bankers in America who would like to find their patrons entertain, at least in some degree, the point of view of the South African Boer.

PEANUTS INSTEAD OF COTTON-SEED.

Announcement that an experiment of crushing peanuts with standard oil mill machinery at Magnolia, Miss., has resulted satisfactorily is likely to increase the interest in peanut-growing in parts of the South where the ravages of the boll-weevil have had their effect upon the cottonseed-crushing industry. The grade of oil obtained from the peanuts is described as being good, with the cake left in shape for stock-feeding purposes. At a conference at Jackson, Miss., last week of railroad men, oil mill managers and farmers with the State railroad commission, figures were made public showing the loss in tonnage in parts of the State through the falling off in cottonseed shipments, and the manager of one oil mill expressed a willingness to pay 75 cents a bushel for all peanuts raised. About a year ago or longer an effort was made under the auspices of the Board of Trade of Little Rock to encourage peanut growing in Arkansas. From time to time since then the subject has been brought to the front, and it begins to appear that the success of experiments in crushing peanuts for oil in cottonseed oil mills may add another great industry to the South and increase the value of the cottonseed oil plants.

R. H. Cobb of Birmingham writes to the MANUFACTURERS RECORD:

I have been a constant patron of your great paper for 26 years. It is worth ten times the price of subscription to the average business man.

WELL-ADMINISTERED PRISON.

In their annual report to Governor Crothers the directors of the Maryland Penitentiary, referring to the fact that during the year \$35,151, representing the difference between receipts and disbursements, were turned back into the State treasury, pay the following deserved tribute to the administration of Warden John F. Weyler:

"This handsome contribution to the public treasury is in line with the unbroken history of the preceding 20 years, and it is gratifying to state the fact that these annual sums have now reached in the aggregate the grand total of \$522,251.02 during the incumbency of the present Warden, a record which earns for him the signal distinction of being not only the most successful prison administrator in the United States, but one of the most valuable friends the Maryland taxpayer has."

RURAL TELEPHONES.

Five years ago there were but 25 telephones in Anderson county, South Carolina, outside of the city of Anderson. They were served by four lines connected with the Anderson Exchange. Now there are 29 farmers' lines connected with the exchange and 300 farmers' telephones within the county. The Anderson Daily Mail, which gives these facts, says that, in a measure, each of the farmers' telephone lines connected with the local exchange is an independent company, and that the farmers who have thus organized themselves look after the lines and keep them up.

THE COTTON MOVEMENT.

In his report for January 13 Col. Henry G. Hester, secretary of the New Orleans Cotton Exchange, shows that the amount of cotton brought into sight during 135 days of the present season was 8,831,346 bales, an increase over the same period last year of 1,275,544 bales. The exports were 4,854,431 bales, an increase of 925,522 bales. The takings were, by Northern spinners, 1,320,932 bales, an increase of 38,769 bales; by Southern spinners, 1,042,078 bales, a decrease of 15,800 bales.

Cement Products Convention.

The seventh annual convention of the Northwestern Cement Products Association will be held in Minneapolis, Minn., February 28 to March 1. As a suitable building could not be obtained for the exhibition of cement machinery, the usual cement show held in connection with these annual conventions will not take place.

The chairmen of the committees in charge of the convention are: Arrangements, E. H. Cobb, Hydraulic Press Brick Co.; membership, J. C. Van Doorn, Universal Portland Cement Co.; publicity, M. T. Roche, Northern Brick & Supply Co., and program and entertainment, W. C. Berry, Universal Portland Cement Co. A number of interesting papers on various phases of the cement industry will be read and discussed. The officers of the association are: President, H. E. Murphy, Manitowoc, Wis.; treasurer, J. M. Hazen, Minneapolis, Minn.; secretary, Harvey B. Smith, Minneapolis, Minn.

Representative business men of Chattanooga are planning to celebrate the completion of two power plants now under construction at Hale's Bar, on the Tennessee River, and at Parksville, on the Ocoee River, by a spectacular electrical exposition to continue one week.

The American Breeders' Association, W. M. Hays, Washington, D. C., secretary, will hold its seventh annual meeting February 1-2 at Columbus, O., in connection with the National Corn Exposition in that city.

THE SOUTH'S OIL CONTRIBUTION.

By DR. DAVID T. DAY of the United States Geological Survey.
[Written for the Manufacturers Record.]

Considering Oklahoma as a Southern State, the South's total yield of oil in 1909 was 71,602,260 barrels, or one-third of the yield of the United States and 11,000,000 barrels over. Only a part of that produced in the Gulf and Mid-Continent fields went for fuel oil. All of the Caddo oil and that from West Virginia and Kentucky was sold for refining purposes. The price obtained for it was \$44,405,071, whereas the equivalent in coal would have been worth less than half as much.

These values are taken at the place of production, but the oil was worth even more to the South, because much of it was refined at home and more was sold at Gulf seaports for foreign shipments.

Divided by States, the production was as follows:

Two Years' Southern Oil Production.

	1909.	Value.	1908.	Value.
Ky.....	639,016	\$518,299	727,767	\$706,811
La.....	3,059,531	2,422,449	5,788,874	3,503,419
Okl.....	47,859,218	17,428,990	45,798,765	17,094,843
Tex.....	9,299,403	6,793,050	11,306,464	6,700,708
W. Va.....	10,745,092	17,642,283	9,523,176	16,911,865
Total.	71,602,260	\$44,405,071	73,045,946	\$45,517,646

In addition to this liquid fuel, the South supplied in 1908 about 127,000,000 cubic feet of natural gas which was used. A much larger quantity went to waste. The utilized gas was worth \$16,000,000, or about 14 cents per thousand cubic feet. It was produced and used chiefly in West Virginia and Oklahoma as follows:

	1909 cubic feet.	Value.
Arkansas*	100,000	\$10,000
Kentucky.....	1,430,062	\$24,271
Louisiana.....	1,752,372	\$26,537
Missouri.....	152,280	\$2,592
Oklahoma.....	11,924,574	\$60,159
Tennessee.....	2,200	\$30
West Virginia.....	112,181,278	\$1,837,130
Total.....	127,542,766	\$16,391,339

*Estimated.
Including Alabama and Texas.

Two very important facts are evident from these tables. In the first place, that there was a decline in the total production of both oil and gas, and second, that not all the producing sections shared in this loss, for both the Caddo oil field and the older producing State of West Virginia increased their products and realized more by the sale. This increase was easy to understand in the Caddo field, where operations are so new that the limits of the field are by no means known, and it is rather more surprising in West Virginia. There the increase was due both to the development of the Shinnston pool, in Harrison county, and to the fact that in the well-proved territory there is much land still to be drilled upon. In fact, the proved acreage in West Virginia which has not been drilled exceeds that which has been drilled over. Another important fact is that the producing territory in many counties is remarkably uniform, and can be developed with much the certainty of coal fields. No better example of this could be found than Roane county. Probably nowhere in the world has the economy of drilling been developed so highly as in West Virginia. Steel derricks are commonly used, corrugated galvanized iron construction is the rule, wire cables are used for drilling and for pumping, and of greater efficiency still is the harmony between oil and gas man in saving every foot of gas accompanying the oil and applying it by economical gas engines to furnishing the power for drilling and pumping and burning it in economical fashion for steam for heating oil tanks in cold weather. These factors will make West Virginia one of the long-lived fields of the world.

During the year 1857 wells were drilled in the State. This is the largest number in recent years. Of them, only 368 were dry holes, or 19.9 per cent. There were

1134 oil wells and 357 gas wells. The proportion of dry holes would have been smaller still had it not been for the advance guard drilling eastward toward the mountains in Harrison county, led on by the Shinnston pool, which developed many fine wells in the dense 50-foot sand. These wells decline rather rapidly until the sand is well shattered by nitroglycerine. As an example of the reliability of the proved territory, Roane county only had 20 dry holes out of a total of 208, or 10 per cent.

While there are many counties well within the oil regions of West Virginia that have hardly had a well drilled in them, speculation is already reaching out to develop entirely new oil territory, and rather obviously attention has gone first over the line into the adjoining counties of Kentucky. Lawrence county will be the first region to be thoroughly explored in the hope of developing a good Berea grit pool. Later the more venturesome will probe the counties to the southeast, even into Virginia. Arrangements were made in that State by local residents to test the land in the vicinity of Manassas.

Kentucky has three oil pools that claim continuous attention, although the finds are only moderately remunerative. Wayne county, on the southern boundary of the State, is most important, and the wells, while uniformly small, seldom prove dry within the proved areas. Wolfe and Cumberland are the other counties of interest, but they were of little interest in 1909. The average initial production per new well in 1909 was 23.8 barrels, an increase from 18 barrels in 1908.

In all, 171 wells were drilled in the State; of them, 79 were dry. This is lower than the record of the previous year.

Tennessee is about at a standstill, but with the development of an active and efficient State geological survey under Dr. George H. Ashley, who has earned national reputation as a fuel expert in the United States Geological Survey, the general investigation of the State's oil and gas resources will be greatly stimulated.

Following the Appalachian oil fields farther south, there was some activity in the Huntsville (Alabama) region, and indications of oil and gas were investigated with interesting results in Fayette county. These have already been published in this journal. The development of this field must inevitably lead to careful exploration of the southern portion of the State. Alabama sold 1,000,000 cubic feet of gas, worth \$800.

In continuing in thought from Alabama across to Louisiana one must not forget that Southern Mississippi needs a careful geological examination as to the oil possibilities. This should precede any wild-cat drilling for oil. This is equally true of Eastern Louisiana, where gas indications are frequent, with occasional traces of oil. In fact, Monroe, La., has developed quite a gas supply, and signs of oil. From this locality westward and southward the oil indications multiply. Of them all, Caddo was the statistically interesting field.

Three divisions or pools characterize the Caddo oil and gas field. The oldest is the eastern, extending from Mooringsport north through Oil City, and including Black Bayou on the east. On the north is the Vivian field, and on the west the new developments of James Bayou. The oils are dark and heavy on the east, but in the western division they are entirely different, and like Pennsylvania oils. This variation is difficult to understand, for though so radically different, the oils probably have a common origin. The field is

well described by Dr. George D. Harris, State Geologist of Louisiana, in Bulletin No. 429 of the United States Geological Survey. Dr. Harris describes the Caddo pool as a "stratum deposit" analogous to the Oklahoma oil pools, which makes the great variation in the composition of the oils more puzzling than the original conception of Veatch, who predicted the field on the idea that it was a dome generally similar to the Gulf oil formations. Under this conception the great changes in stratigraphy within short distances makes possible correspondingly great changes in oil from the same source when it passes from the original mother oil through the shales found to the west and accumulates in sand lenses, much can be learned as to the correctness of these views by the lateral extent of the pool to the west. The greater the extent of the field the more probable its stratum character, and vice versa.

Turning south from the Caddo field, one finds the saline domes within 75 miles, at Winnfield, in Winn parish. At Pine Prairie prospecting is going on for oil. This has already developed a very large saline dome, so large, in fact, that much work will be necessary to adequately explore it. These domes of salt not only suggest the occurrence of petroleum, but they seem to be characteristic of all the Gulf pools. Their distribution is extensively irregular; that we have found them all is very unlikely, and therefore the development of more oil pools in Louisiana and Texas becomes more and more probable as the relationship between oil and salt is worked out by the geologists. This prospect of further fields of oil is more encouraging than the record of production in the Gulf region in 1909. There was a general decline at a more rapid rate than in 1908. Louisiana declined 47 per cent., in spite of the increase due to Caddo. Nevertheless, everyone recognizes that the prospecting on the Gulf coast has been entirely insufficient for a satisfactory knowledge of the oil and gas resources. No wiser expenditure of public money could be made by Louisiana than in continuing and expanding the valuable geologic surveys of State Geologist Harris, and the same is true in Texas. In this State, as in Louisiana, the total number of wells drilled declined; nevertheless, prospecting was active in many counties where oil indications are known, even to Reeves county, west of the Pecos River, and south of this near Marathon and Marfa stations, on the Southern Pacific Railroad. Oil was found in all three localities.

Some part of the inactivity in drilling in Texas may be ascribed to bountiful supply of oil delivered at Texas ports by the Texas and Gulf pipe lines from Oklahoma.

The course of this review of what happened in the Southern oil fields in the year 1909 has taken the reader from the Appalachian oil fields, where the oil occurs in rather definite relation to a certain anticlinal structure in very regular alternations of sands and shales, southward through the limestones of Tennessee and Alabama to the Gulf region, where saline domes scattered here and there over a great area furnish centers of accumulation. Turning north again, now, and following the western limb of the South's horseshoe of oil, we pass through the Corsicana (Texas) field and enter great Mid-Continent field, extending from North Texas through Oklahoma into Kansas.

As soon as we leave the Gulf the oil fields change in geologic structure and in the character of the oils. In the Corsicana and Powell fields the oils have already lost part of the constituents that characterize them in the South. They have lost most of their sulphur and asphalt. It is only natural to question whether the same salt domes with the asphaltic oil might not be

found deep below the Corsicana accumulations, and it is easy to theorize to the effect that the oil in coming up from these possible saline domes has left part of itself behind in a way that we are beginning to understand, but the oil industry has lost rather than gained by too much theorizing for which there is no proof.

Let it suffice to think of Central and Northern Texas as the region where the saline domes give place to oil pools collected in sand strata enclosed in shales. Of this type are the oil pools of the great Mid-Continent field. But they are different from the oil sands of the East. Underneath Oklahoma the sands are large and small lenses, some at one depth and some at another, and sometimes they overlap. In these lenses the oils are collected much more evenly than in the saline domes, but the sands often thin out at the edges, and such lenses are by no means so persistent as the strata in Pennsylvania.

Beyond doubt very many such lenses still remain to be found in Oklahoma. One was developed in 1909, the Preston or Hamilton Smith pool, a few miles north of Okmulgee. It proved very irregular, and nothing like the great Glenn pool south of Tulsa. But there was no lack of production. In fact, the association of oil producers tried earnestly to stop all new drilling in 1909. As a result, there was only a very slight increase in production, but nevertheless the Mid-Continent field was the second greatest field in the world, and the product, 49,804,922 barrels, was slightly greater than ever before, in spite of the low price per barrel.

By the end of 1909 the accumulated stock of crude oil had risen to 56,000,000 barrels, in spite of selling as much as possible for fuel after distilling off the gasoline and kerosene ("skimming"). Kansas made little effort to keep up oil drilling, as the price for the heavy crude was only 39 cents per barrel.

In spite of low prices, there is no part of the world where the oil industry has brought more prosperity and rapid growth than in Oklahoma and Kansas, and natural gas, which exists there in great quantities, has done even more to develop manufactures. Were it not for the ease with which crude oil can be piped to distant trade centers, the Mid-Continent field would be the greatest oil-refining center in the country.

A closing look at the South's oil industry must emphasize the fact that it is not yet fully developed, even in the oldest fields. It must still increase in many regions, and probably as a whole. This not only means cheap light and power, but the production of great wealth with the firm establishment of efficient manufacturing centers.

PETROLEUM IN 1910.

Two-thirds of the World's Output Produced in This Country.

The year 1910 has been sufficiently eventful in the development of new oil supplies in the United States to more than keep up the country's phenomenal production of the last three years. In fact, the production increased to over 200,000,000 barrels, which is two-thirds of the world's production and several million barrels more than the whole world produced seven years ago.

The most surprising developments of the year were in the Sunset-Midway district of California. The developments in the Caddo field of Louisiana also entirely changed the position of that field. Connected with the developments in both these fields were important changes in the conditions of marketing the oil.

The production of oil in the United States in 1910, as reported by D. T. Day of the United States Geological Survey,

was between 200,000,000 and 208,000,000 barrels, approximately, as follows:

	Barrels.
Illinois.....	32,000,000
Appalachian and Lima-Indiana fields.....	32,000,000
Gulf and Caddo fields.....	14,000,000
Mid-Continent and Rocky Mountain fields.....	53,000,000
California.....	73,000,000
	204,000,000

Stocks increased over 50 per cent. on the Pacific coast. Prices of crude oil declined except in the Mid-Continent field, where they increased to 44 cents a barrel.

In most of the Gulf field the general decline continued. Early in March a 2000-barrel gusher at Hoskins Mound, Tex., renewed interest in the field. In April a gusher was drilled in the eastern part of the proved area in the Humble field to a greater depth than any well previously sunk in the Gulf field. The well soon choked up, however, and added little to the total product of the field, but it served to promote deeper drilling at several localities. Confidence was again aroused in the hitherto disappointing Markham pool, in Matagorda county, Texas, by the drilling of several large gushers. One drilled in April and one in December were rated at 10,000 barrels a day, and two others yielded over 3000 barrels a day. An 800-barrel well was drilled in Brown county. Oil was struck at Cuevitas, in the southern part of Starr county. Piedras Pintas, Duval county, reported several small producers. Drilling was active near San Antonio. Twenty miles northwest of Toyah, on the western edge of Reeves county, in the Pecos Valley, the shallow oil wells were acquired by the Producers' Oil Co. and two wells were drilled with prospects so encouraging for a large field that much land was bought from the State by several companies. Development now waits on the determination of the question whether the oil goes with the surface rights. The State will probably lease the oil rights.

In Louisiana three gushers were struck in the Vinton region, in the southwestern part of the State, each yielding 3000 barrels or more a day. The decline in production in the southern part of the State was in marked contrast to the increase in the output of Caddo field, in the northwestern corner of the State.

Just before the opening of 1910 the J. C. Trees Oil Co. carried well No. 4 to a depth below 2300 feet, and it began to yield over 2000 barrels a day before the bit had been removed. This well is in the Stiles tract, on the western edge of Sec. 17, T. 21 N., R. 16 W., on the west side of James Bayou. The production of this well declined in a month to half its initial rate, then gradually increased to 3000 barrels, and continued at a rate varying between 1000 and 2000 barrels a day. The Gulf Pipe Line Co. at once drilled on a large tract of its land two and one-half miles southwest of the Trees well. In April the No. 1 Burr tract of this company came in at a depth of 2225 feet, flowing 2000 barrels a day. The oil from all these wells is light. Burr No. 1 showing 43.6 degrees Baume. It is rich in paraffin and contains no asphalt. The Producers' Oil Co. developed the territory between the Burr and the Stiles tracts, obtaining, in Sec. 27, T. 21 N., R. 16 W., a well giving a larger yield than either of those just mentioned. This was at once offset by a well (No. 9 Stiles tract) 95 feet farther west, which showed a greater yield than the Producers', but the production of each well was influenced by the other. Northeast of the No. 4 Trees a well showed salt water, and several dry holes were drilled farther northwest. Late in June the Producers' Oil Co. brought in well No. 6 in Sec. 33, T. 21 N., R. 16 W., which yielded over 12,000 barrels a day. This well was struck by lightning on June 19, before it was finished, but the fire was extinguished in 48 hours. The wells in James Bayou range in depth from 2207 feet to over 2300 feet. Several other great wells have shown the large capacity of this pool. A table of these wells is given in Bulletin 429 of the United States Geological Survey. In October the Producers' Oil Co. drilled a test well in the southeast quarter of Sec. 3, T. 16 N., R. 20 W., on the south side of James Bayou, a mile or more south of the proved area, and obtained over 5000 barrel a day. This is a notable extension of the field. By drilling the No. 2 Hart tract well five feet deeper the Trees Oil Co. increased its yield from 1000 to 6000 barrels. Near the end of the year a well on the Isles Lane farm, on the other side of James Bayou from the Stiles tract, yielded 8500 barrels a day. Three other events aided the development of this pool later in the year. The pipe line of the Standard Oil Co. was completed from Oklahoma to the refinery at Baton Rouge, La. It passes close to the Caddo field, and a lateral was promptly laid connecting the James Bayou pool, and plans were begun for duplicating the line. In June the State Legislature passed acts calling for vote by the people on the establishment of a system of protection against the waste of natural gas in the Caddo field. The resultant vote ratified these measures. In October the Standard Oil Co. purchased over 100,000 acres of proved oil territory in the James Bayou region, and has actively continued development work. Other important acquisitions by lease were made by the Producers' Oil Co., and the entire territory covered by Ferry Lake, about 8000 acres, was leased by the Gulf Company from the State Levee Board.

The output of oil increased notably during the year, amounting to over 5,000,000 barrels and requiring the construction of two additional pipe lines to Texas ports, one by the Gulf Company, to connect at Lufkin, Tex., with its main line to the Gulf, the other by the Texas Company to Beaumont.

The price of light Caddo oil was lowered in July from 40 cents to 38 cents by increased production, but rose again to 40 cents in September and to 42 cents in November.

In Alabama a significant strike of natural gas was made near Fayette, in the western part of the State, which will probably result in a pipe to Birmingham in the near future. The field was surveyed by M. J. Munn and party, of the United States Geological Survey, in co-operation with the Geological Survey of Alabama.

In West Virginia the production of the Shinnston district, in Harrison county, declined sharply to 3000 barrels a day, even after repeated agitation of the older wells and unusually energetic efforts to extend the field. Prospecting was active in Roane, Tyler and Ritchie counties.

A persistent effort was made to extend the West Virginia field over into Lawrence county, Kentucky, with moderate success. The developments at Parmleysville, Ky., in the old Wayne county pool, were satisfactory. Much wildcatting was begun in Logan and other western counties of Kentucky with the hope of extending the Illinois and Indiana fields to the south.

The price of oil of Pennsylvania grade declined from \$1.43 a barrel at the beginning of the year to \$1.30 in June, and remained at this figure to the end of the year. Other grades declined proportionately.

Stocks in the Mid-Continent field (100,000 barrels) were drawn upon at the beginning of the year. Production in Kansas continued to decline, and any tendency to increased drilling in Oklahoma, due to slightly better prices, was much discouraged by severe droughts in the latter part of the year. Still, the total production for

the Mid-Continent field increased to over 53,000,000 barrels, and the increase was accompanied by a gain in price to 42 cents a barrel. Gas was discovered at Poteau, Le Flore county, Oklahoma, in an anticline pointed out by State Geologist Gould. In April an important sale of oil property, involving a production of 20,000 barrels a day, was made to the Central Fuel Oil Co., which is backed by outside capital. In July a well drilled 1800 feet deep near Henryetta, in Okmulgee county, yielded 600 barrels a day and started sufficient drilling to prove that the field is very spotted. In September the Highland Oil Co.'s No. 3 proved a gas well that has an estimated capacity of 84,000,000 cubic feet a day, which would make this the largest gas well ever struck. A deep field was also developed at the close of the year in Osage county.

In March the price of Mid-Continent oil lighter than 30 degrees Baume was raised to 38 cents a barrel. On September 1 the price was increased to 40 cents, and late in the month the price of heavy oil was also raised to the same figure. In November the price of both grades was raised again to 42 cents.

Natural Oil Filtration.

Clearing up what has been rather a cloudy matter as to what natural oils can be considered filtered oils and giving a clear conception of the filtering process in the earth is a bulletin of the United States Geological Survey just issued for free distribution. It is entitled, "The Fractionation of Crude Petroleum by Capillary Diffusion," and it embodies the results of a long and tedious investigation by J. Elliott Gilpin and Marshall P. Cram, under the supervision of Dr. David T. Day. In introduction the investigators say:

"When, in process of refinement, black vaseline is filtered through warm, dry fuller's earth, the first product is an oil that is perfectly liquid at ordinary temperatures, but the succeeding portions are progressively more viscous until fairly hard vaseline is obtained. The observation that a fractional separation of oils in vaseline had been effected suggested to David T. Day that a like result might be obtained with crude petroleum. He applied this method to a sample of green crude petroleum from the 'third sand' of Venango county, Pennsylvania, and found that light products, chiefly gasoline, first appeared when such crude oil was allowed to filter down through a long glass tube filled with granulated or powdered fuller's earth.

"This result was followed by experiments with a more elaborate system of specially-constructed funnels similar to those used by the refiners of vaseline in testing the comparative value of various fuller's earths. The results from these experiments were briefly summarized in a paper on the ability of petroleum to migrate in the earth. Engler later verified these results and showed that the separation was mechanical, and that no oxidation was effected in the process. Day next used a large closed funnel of galvanized iron, holding about 100 pounds of fuller's earth. When crude petroleum was dropped slowly and regularly into this funnel rather light oils were obtained at first, followed by the usual succession of heavier oils. As it was evident from this work that much of the oil passed through crevices without any change, Day tried the effect of reversing the route of the oil and of allowing it to diffuse upward through a tube packed tightly with fuller's earth. In such a tube the lighter constituents rose much more rapidly than the more viscous oils, so that by separating the fuller's earth from different sections of the tube and displacing the oil by water very dif-

ferent oils were obtained from the upper and lower parts of the tube.

"By using several tubes and uniting oils of the same specific gravity oil of different grades can be collected in sufficient quantity to be fractionated again, and the process can be continued until oils result which are not altered by further passage through tubes filled with fuller's earth."

Twenty-six pages of the bulletin are filled with details of the experiments, which are summarized as follows:

"1. When petroleum is allowed to rise in a tube packed with fuller's earth there is a decided fractionation of the oil, the fraction at the top of the tube being of lower specific gravity than that at the bottom.

"2. When water is added to fuller's earth which contains petroleum the oil which is displaced first differs in specific gravity from that which is displaced afterward, when more water is added.

"3. When petroleum is allowed to rise in a tube packed with fuller's earth the paraffin hydrocarbons tend to collect in the lightest fraction at the top of the tube and the unsaturated hydrocarbons at the bottom.

"4. When oil is mixed with fuller's earth and then displaced with water, about one-third of the oil remains in the earth."

IRON AND STEEL EXPORTS.

About \$200,000,000 Worth Sent Abroad in 1910.

Two hundred million dollars' worth of iron and steel manufactures were exported from the United States during the calendar year 1910, a larger total in value than in any earlier year. The largest exportation prior to 1910 was \$197,000,000 worth in the calendar year 1907, while in 1902 the total was but \$98,000,000, and in 1903, \$90,000,000, thus indicating that the exports of 1910 will be more than those of 1902 and 1903 combined. In fact, iron and steel manufactures now form nearly one-fourth of the total value of manufactures exported. The total value of all manufactures, including those of iron and steel, exported during the calendar year 1910 aggregated, according to the Bureau of Statistics, Department of Commerce and Labor, about \$830,000,000, and those of iron and steel alone about \$200,000,000. It may be properly said, therefore, that iron and steel manufactures form in value nearly one-fourth of the exportation of manufactures of all kinds. In addition to this large exportation to foreign countries, the shipments of iron and steel to Porto Rico, the Hawaiian Island and Alaska aggregated about \$12,000,000.

What are the principal articles forming this enormous total of manufactures exported, and to what parts of the world do they go? These facts are shown in detail in the annual statements of the Bureau of Statistics. They show that practically every country of the world receives and utilizes in one form or another the products of our iron and steel manufacturing establishments, and that practically all the important classes of these products are included in the list of exportations. The United Kingdom, Germany and France, the great manufacturing countries of Europe; Canada and Mexico, our next-door neighbors; China and Japan, our neighbors across the Pacific; Egypt, India, the Straits Settlements, the Dutch East Indies, Siam, the Philippine Islands, Central Africa and Northern South America in the tropical world, and Australia, New Zealand, South Africa, Argentina and Chile, in the South Temperate zone, are all purchasers of American manufactures of iron and steel. Our cash registers are recording business transactions in practically every country of Europe, in various countries of North and South America,

China, Japan, India, the Dutch East Indies, Siam, the Straits Settlements, Australia, New Zealand, British Africa, Portuguese Africa, Egypt and the Canary Islands. Our electrical machinery goes to more than 75 different countries and colonies distributed throughout all of the grand divisions of the world. Our printing presses are performing service in most of the European countries, in the principal countries of the Orient, in Australia and the Philippine Islands, in French and German Oceania, in French Africa, Portuguese Africa, Liberia and other sections of that continent. American windmills are exported to more than 70 countries and colonies of the world, including Turkey in Asia, India, Dutch East Indies, French China, Dutch Guiana, French Africa, British West Indies, Haiti, Santo Domingo, Egypt, German Africa, the Straits Settlements, Asiatic Russia, the islands of the Mediterranean, Roumania, Brazil, Japan, China and the Canary Islands. Locomotives are sent to British South Africa, Korea, Japan, Egypt, Santo Domingo, Costa Rica, India, Hongkong, New Zealand and Portuguese Africa. American typewriters are distributed to more than 80 different countries and colonies of the world, including all of the grand divisions. American sewing machines go to an equal number of countries, while of numerous other articles, such as wire, stationary steam engines, bars and rods of steel, iron sheets and plates, table cutlery, firearms, laundry machinery, mining machinery, locks and hinges, structural iron and steel, wire nails, pumping machinery and pipes and fittings, the number of countries represented in the export list is in each case more than half a hundred.

Among the principal articles forming this grand total of \$200,000,000 worth of iron and steel manufactures exported in 1910 are sheets and plates of iron and steel, \$14,000,000 in value; steel rails for railways, about \$10,000,000; wire, over \$9,000,000; pipes and fittings, more than \$9,000,000; tools, chiefly for use of builders, \$8,000,000; sewing machines, about \$8,000,000; electrical machinery, approximately \$7,000,000; structural iron and steel, about \$7,000,000; mining machinery, more than \$6,000,000, while other article in which the values for the year ranged above \$1,000,000 are wire nails, woodworking machinery, windmills, sugar-mill machinery, traction engines, stationary engines, printing presses, pumps and pumping machinery, cash registers and locomotives. Of tinplates, including terne plates and taggers tin, the value of exports for the year was a little more than \$1,000,000, the quantity exported being about 30,000,000 pounds, and the countries to which sent more than a dozen in number, a large proportion of them going to Canada, Mexico and Cuba, but smaller quantities to the countries of Central and South America, Asia, Oceania, Africa, and in a few instances to Europe.

IRON ORES OF ALABAMA.

Discussion of the Extent and Character of Resources.

Editor Manufacturers Record:

On my return from the field I read with considerable interest the very excellent article by Dr. J. S. Grasty, entitled "The Hematites of Alabama," printed in your issue of the MANUFACTURERS RECORD of December 1, 1910, and also the interesting comment of Dr. John J. Porter in your issue of December 15.

The increased tonnage of available ore shown in the Weewoka district by Dr. Grasty's interpretation of the structure is a valuable contribution to our knowledge of these ores. In discussing the tonnage, occurrence, etc., of the Cambrian ores of

Eastern Alabama Dr. Grasty could, with advantage, have said more about the Columbiana district, with which I happen to be familiar myself.

The red hematites of the Columbiana district are situated in Shelby county, Alabama, about two and one-half miles north-east of Columbiana. The ore beds are found in the Weisner formation of Cambrian age, and are four in number. The Weisner formation consists of light brown, coarse-grained quartzites and conglomerates, with interbedded yellow arenaceous shales. The quartzite is highly resistant to weathering agencies, and is a marked topographic feature. A very considerable portion of the ore in this formation is above water level, which is an important factor in the mining of these ores.

The ore beds vary in thickness, but show a gradual thickening toward the north end of the district. The 35 to 40-degree dip of the ore beds is from 25 to 30 degrees steeper than the slope of the mountain, so that the limit of economic open-cut work, if such were undertaken, would soon be reached. The ore is uniform in physical character and chemical composition.

The following analyses shows the chemical character of these ores:

	I.	II.
Iron.....	46.75	48.80
Silica.....	23.62	18.21
Alumina.....	4.26	4.05
Phosphorus.....	Trace	Trace
Sulphur.....	Trace	Trace

These ores are hard, red, siliceous hematites, breaking into cube-like blocks, which is due to a characteristic jointing. This aids greatly in the mining of these ores. Because of these joint planes, these ores give off a great quantity of float, which in places literally covers the mountain and gives the appearance of much thicker ore beds than disclosed after extensive explorative work.

These ores outcrop for a distance of more than one-half a mile, and with an estimated minimum thickness of 10 feet as the sum of the thickness of these beds, and working to a depth of 3000 feet down the slope, the available tonnage is not less than 8,000,000 tons.

What has been said about the chemical and metallurgical character of the gray ores by Dr. Grasty applies equally as well to the red hematites of the Columbiana district, and the three marked differences between the gray ores and the brown ores, which analyses do not tell, but which are brought out by Dr. Porter, may be likewise applied to the Columbiana ores.

T. POOLE MAYNARD,

Asst. State Geologist.

Atlanta, Ga.

Editor Manufacturers Record:

I have read with much professional interest Dr. Grasty's article on the hematites of Alabama, which appeared in your issue of December 1, 1910.

Particularly was I impressed with that part of it referring to the gray ores. That this ore must come into use in the Birmingham, Gadsden and Chattanooga districts, and that at no distant date, there can be little doubt.

In all these districts soft ore has almost become a thing of the past, and brown ore is yearly becoming more expensive and hard to get, except with one or two companies who happen to be a little more fortunately situated than their neighbors, and even with them brown ore costs are much higher than in former years.

There is no doubt, either, but what this gray ore can be economically and advantageously used as a mixture with the hard red ores of the Birmingham and Gadsden districts. When the writer was with the Southern Steel Co. we used at the Alabama City furnace of that company quite a tonnage of gray ores shipped us by the

Gray Ore Co., of which Col. T. G. Bush was president, quite successfully, but a fair test was not made of it, because, unfortunately, we could not get a sufficient quantity to make it a very great part of the burden, and used it only as a part of the regular brown ore carried, but with very gratifying results.

From what I know of this gray ore, I am sure it can be economically mined, and the fact that it is so close to the above-mentioned districts it can be delivered at the furnaces now at a much lower cost than they are enjoying on their brown ores, and that it will successfully take the place of brown ore with the hard ore mix, there is absolutely no doubt.

It can also be shipped into the Chattanooga district. Chattanooga has for years drawn on the Gadsden district for its red ore supply. The writer, as manager for the North Alabama Mining Co. and the Stewart-Durfee Mining Co., shipped the entire output of these two concerns while with them almost exclusively into the Chattanooga district.

Men much better posted on furnace practice than the writer declare that this gray ore, which exists in such great abundance, will unquestionably take and satisfactorily fill the place of the brown ore being used now, and I believe it will, from observations of my own, and if this is true, I am sure that, gone at in the right way, it can be put upon the market at a much more attractive figure than almost any brown ore now being used.

C. E. STEWART.

Attalla, Ala.

Are American Manufacturers Guilty?

A merchant writing from Bokesburg North, South Africa, to the MANUFACTURERS RECORD emphasizes with considerable warmth his experience in trying to open up trade with the United States. His letter is so directly in line with many that come to this office that we publish it for the consideration of manufacturers seeking to do foreign trade, as follows:

"I am taking the trouble of writing to you to let you know how American houses treat foreign inquiries. Some months ago it occurred to me that there was an opening here for one to handle anything in the way of novelties, notions and useful articles of merit that are rarely shown or put on the market by English houses, who undoubtedly have the bulk of South African trade. I wrote about 20 American firms whose names and addresses I got from a guide book. During the past month I have had replies from 13 houses. In 11 cases out of the 13 I had to pay three pence (six cents) overcharge postage on their letters. In 9 out of 13 replies I was told that the firm in question was sending me under separate cover its price-list or catalogue. In only one instance did I get such a catalogue or paper, and that was your copy of the MANUFACTURERS RECORD. The reason none of the catalogues, etc., was delivered is no doubt on account of their having insufficient stamps put on them to take them through post to their destination, and all my time and waste of cash in postages and overcharges has been in vain, and of no result, while the catalogues and books and papers and what not that might have been dispatched to me are now no doubt knocking about in some dead letter office somewhere.

"In a number of instances where I wrote to manufacturers whom I knew made or dealt in small wares that would perhaps cost a few cents each and would come through the post at a very small charge I asked them to send me a free sample for inspection. This would have meant a very trifling cost to them, but would have been a great help to me if I could have seen and handled a few specimens, but in

no instance did I receive any such trifling courtesy or specimens. A number of long letters reiterate over and over again the superiority of their goods over all others, and so on, and in one or two instances a notification at the end of the long and uninteresting epistle that a set of samples would be sent me for \$1.50. This, then, is the result I have obtained for my trouble for trying to get in touch with American houses who are reported to be very smart and keen to get business. I have found them just the opposite, and, moreover, the ignorance prevailing in America as to the ways and means of opening business relations with this country is colossal. It seems to me not 1 per cent. of trading houses know the cost of postage on a letter from the United States to South Africa; if they do, they were too mean to defray the cost, but I was so anxious to see what could be done that I cheerfully paid out the overcharge on the letters to see if same would be of any service to me. In one instance only did I find anything to go upon to help me in fixing up an order, and I am sending that order with the cash to cover same by this same mail, trusting entirely to the honor and integrity of the house as to whether the goods are as represented. Probably I shall be bad, but 'judge not, lest ye be judged.' I am sending you this in the hope that it may be of some service in bringing before the manufacturers (who desire an opening in this country) the necessity of altering their tactics in dealing with people who do not, as a rule, waste their time and postage stamps deliberately.

"Respecting the outlook for introducing American goods into South Africa, the outlook is splendid, but the probabilities nil. American manufacturers are too independent and cock sure that we cannot get their goods elsewhere, and so on. A case in point is the miners' shirts and overalls. This country (the Transvaal gold fields) has in the past absorbed huge quantities of these goods, but the suppliers got more and more independent, insisted on minimum quantities being ordered which only large warehouses could handle, kept pushing the prices up to such an extent that now hardly a wholesaler handles the goods,

and British manufacturers are copying them successfully, thus enabling everyone who handles them to make a living profit out of the goods instead of everyone working solid for the benefit of a few American houses who squeezed the last cent out of everyone.

"I wanted to start a depot for novelties, notions and advertising specialties, but have now had to give up the idea of getting any American products. The average American, I take it, wants to see what he is buying before parting with his money; other people do also; but on account of the suspicion, meanness (call it what you like), the American manufacturer is generations behind the European houses in this respect."

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In a series of resolutions bearing upon revision of the tariff the directors of the Board of Trade of Savannah, Ga., Mr. Thomas Purse, secretary, in arguing for a revenue tariff on imported timber, lumber, turpentine and rosin, say:

"That it is a notorious fact that the people of the South Atlantic and Gulf States

are in the main small farmers. By that class is owned a great preponderance of the growing timber in the yellow-pine belt from which is produced three of the principal commodities which constitute the basis of Savannah's commerce, viz., lumber, rosin and spirits of turpentine. With the prosperity of that class Savannah's welfare and growth is inseparably connected, and we will resist and oppose, as a blow at our own interests, any tariff schedule or party policy which proposes to sacrifice the people of the yellow-pine belt for the benefit of the people in other sections where pine timber, rosin and turpentine are not produced."

The Railroad Problem.

Editor Manufacturers Record:

To what are we drifting? It occurs to us that in the hands of seven men lies the weal or woe of this great nation! This seems a startling proposition, and may appear exaggerated, but follow us for a few moments and see if we are wrong. The Interstate Commerce Commission has the power to fix the rate at which transportation by our great railroad system shall be carried. If each of them were endowed with the wisdom of Solomon they would be unequal to the task of doing justice to the various roads, each of which is surrounded by conditions different from the other. They are not men brought up even as men of business, but merely picked out by the President from all sorts of professions, and not one of them can be called an expert in railroad affairs, as far as we can learn.

The railroads are so interlinked with all the industries of this country that a blow given them is felt all through the land, and every industrial plant trembles. Indeed, we go so far as to say, as the railroads prosper so do all industries and labor prosper. Each day a train runs the rails are wearing out, the equipment is being used up and out of the earnings replacement must be made. It is simply a business proposition, and it should be handled by men brought up in business, and not by seven men, however excellent they may be in their calling, who have never been trained to pass upon such a complicated proposition. Their position is one of the greatest embarrassment, we must confess, for if they grant the railroad even justice the public will howl and say they have been unduly influenced, and if they do injustice to the railroads, disaster to all lines of business in this country will be the result.

WM. C. SEDON.

Baltimore, Md.
Discovery of large deposits of phosphate rock in Western Montana is reported



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Now under construction; 10 stories; 68x119 feet; reinforced concrete fireproof construction; cost, without mechanical equipment, \$200,000; steam-heating plant to cost \$4000; electric-lighting plant to cost \$3000; electric elevators; contractor, Griffin Construction Co. of Macon; architects, Hentz & Reid of Macon and Atlanta.



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To be completed by April 1; six stories high; 100x180 feet; reinforced concrete and steel foundation; 64 rooms have baths; all outside rooms, with hot and cold water; includes convention hall; location, Moore and Cumberland streets; manager, Charles T. Alexander.

Birmingham Iron Market.

[Special Cor. Manufacturers Record.]

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Old iron rails, \$13.50 to \$14.
Old steel axles, \$16.50 to \$17.
Old iron axles, \$17 to \$17.50.
No. 1 railroad wrought, \$11.50 to \$12.
No. 2 railroad wrought, \$10.50 to \$11.
Dealers' wrought, \$10 to \$10.50.
Old steel rails, \$11 to \$11.50.
No. 1 machinery, \$10 to \$10.50.
No. 1 steel, \$10 to \$10.50.
Old standard car wheels, \$12.50 to \$13.
Light castings, stove plate, \$8.50 to \$9.

The Bessemer Castings Co. of Bessemer, Ala., G. G. Neal, secretary-treasurer, has leased the plant of the Smith Manufacturing Co. and will engage in the manufacture of light castings and stoves.

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Lake Mattamuskeet Drainage.

The Southern Land Reclamation Co. has been incorporated to undertake the Lake Mattamuskeet drainage improvement, to which the MANUFACTURERS RECORD has previously referred. Its incorporators are D. N. Graves of Boston, W. T. Mason, J. P. Kerr and Charles A. Webb of Asheville, N. C. Mr. Graves will be president and general manager, and summarizes the enterprise in a telegram to the MANUFACTURERS RECORD as follows:

"Mattamuskeet drainage district, in Hyde county, North Carolina, comprises approximately 50,000 acres of land in the lake and 50,000 acres surrounding the lake. This lake is to be pumped out and the lake bed and surrounding land will be ditched for carrying water to a central pumping plant (costing about \$180,000), comprising two 24-inch, two 48-inch and six 60-inch centrifugal pumps with a capacity of 2000 cubic feet per second.

Total cost of drainage will be \$400,000. This will be the largest area of any body of water so drained and the largest pumping plant for such purpose in the world. The lake was purchased from the State Board of Education by the Southern Land Reclamation Co."

Special correspondence from Raleigh to the MANUFACTURERS RECORD says:

"The State Board of Education sold the 49,000 acres covered by Lake Mattamuskeet in Hyde county for \$99,500 to the Southern Land Reclamation Co., which today obtained charter and which is to expend \$300,000 more in draining the lake bed. The latter is 15 miles long and six wide, is very shallow, with a soil of rich peat underneath as black as ink, the adjacent territory, including 75,000 acres, being of the same type. It will cost \$400,000 to drain the lake and the adjoining territory. There will be an immense pumping plant, and a basin will be made at the lowest part of the lake, into which will gather any water which may appear after great rains. An old canal from the lake to Pamlico Sound will be reopened and three others cut, and there will be a complete system of dykes and drainage ditches. The company which has bought the lake bed pays also about \$12,000, covering the expense incurred by the State Board of Education for the preliminary surveys and the formation of the greatest drainage district in the South. All the interests are together now, including the Norfolk & Southern Railway and its subsidiary corporation, the John L. Roper Lumber Co., and the various landowners. Everything is now arranged for the work to begin within the next 60 days, and the company will issue \$400,000 in bonds. The present plan is to complete the drainage in 18 months."

Paving at Abilene.

The 25,000 Club,
Abilene, Tex., January 13.

Editor Manufacturers Record:

Abilene is busily engaged at the present time in industrial improvements. The Bitulithic Company of Texas has charge of our business streets, and has 75 men busily engaged in grading the same preparatory to putting in the paving; \$150,000 will be expended in this work. E. L. Norton & Co. are putting on the finishing touches in laying the new enlarged water mains. R. H. Locke, who has the contract for curbing and surface drainage concrete work, is working a large crew of hands to make the streets ready for the paving company. John Barbican, contractor for concrete sewerage crossings, has completed more than one-half of his work, and will shortly have completed his contract. The electric-light people who have contract for putting in ornamental lights for the business district have received the metallic ornamental light poles, and so soon as everything is made in readiness will begin to lay the conduits for underground electric wires and set the poles. All poles of every sort will be removed from the business districts where paving is done.

B. E. LOONEY,
Secretary.

Rocky Mount Improvements.

Chamber of Commerce,

Rocky Mount, N. C., January 13.

Editor Manufacturers Record:

The new passenger station and office building of the Atlantic Coast Line Railroad, and also the Young Men's Christian Association building for Rocky Mount are no longer matters in the far-distant future, but the bids submitted in accordance with the plans made public have been opened and the award made to a local contracting firm, D. J. Rose & Co., the one recommended by Mr. J. F. Leitner of Wilming-

ton, the architect who designed the buildings. Not only was the local contractor the recipient of the awards for the construction of the two buildings for Rocky Mount, but he will build the Young Men's Christian Association buildings at Florence, S. C., and Waycross, Ga., as well. It is expected that the ground will be broken at an early date for the buildings in this city, and the work will go merrily on to an early completion of the two buildings, which in every way will be a credit to our city. The two improvements noted will cost in the neighborhood of between \$55,000 and \$60,000. The Young Men's Christian Association building is a most generous gift to the people of Rocky Mount from the Atlantic Coast Line, and is in keeping with the decided progressive spirit of this most enterprising system.

JOHN L. ABBINGTON,
Business Manager.

Big Texas Iron and Steel Company.

The Dallas Coal, Iron & Steel Co. has been incorporated with a capital stock of \$2,500,000, and plans the development of iron and steel manufacture at Jefferson, Tex. It has purchased the Jefferson Iron Co.'s properties, including 7000 acres of Marion county iron lands (purchased last spring from the Lone Star Iron Co.) and the Jefferson furnace, with an annual output of 36,000 tons of foundry iron. This furnace is to be remodeled and augmented by the addition of brick stoves, while it is contemplated to build two 50-ton open-hearth units, a billet mill and a merchant mill for rolling bars and cotton ties. The Jefferson Iron Co. has been controlled for several years by interests identified with the De Camp Brothers & Yule Iron, Coal & Coke Co. of St. Louis, whose purchase of it was reported by the MANUFACTURERS RECORD, and who are represented in the new corporation. The latter has organized with the following officers: President, R. D. Yoakum, third vice-president of the Quana, Acme & Pacific Railway Co., St. Louis; vice-president and chairman of the executive committee, J. W. Wright; secretary, R. P. Wafford; treasurer, F. J. Schoelkopf, each of Dallas, Tex. The directors are Messrs. Yoakum, Wright, Wafford, Schoelkopf, L. Lipsitz, A. L. Clark, T. L. Camp, A. P. De Camp and W. F. McClurg. The last named is in charge of the plant at Jefferson.

Georgia-Florida Sawmill Association.

The January meeting of the Georgia-Florida Sawmill Association was held at Ocala, Fla., last week, at which the report of the committee appointed to investigate proposed changes in the grading rules, together with the work of the Southern Pine Inspection Bureau, was considered. The report recommends changes in rules in amount of wane allowed on sizes nine inches and over, and that a certain per cent. of rejection be allowed at \$2 per thousand less instead of going into the class below. On prime merchantable and standard 10 per cent. is allowed at \$2 per thousand less instead of going into a lower grade. It was recommended that the Southern Pine Inspection Bureau be taken over free of debt by the Georgia-Florida Sawmill Association, and that it be handled and controlled directly by the association. The report of the committee appointed some time ago to amend the grading rules on planing-mill stock and "roofers" was adopted. As amended these rules will allow shorter lengths, the basis being 8 to 20 instead of 10 to 20 feet, as formerly, with the percentage of still shorter lengths. The next meeting of the association will be held at Jacksonville on February 13.

Remunerative Peanuts.

The prospective value of peanut cultivation in the diversified farming of those States of the South that have not previously given attention to the peanut as a profitable product is illustrated by the results in those localities where this season's crop has just been marketed. References have been made recently in the MANUFACTURERS RECORD to the advantages of cottonseed-oil mills in devoting their dull season to the production of peanut oil, and the general merits of this oil. *The Modern Sugar Planter*, referring to the present season, says that the banks of Ruston, La., have paid out more than \$60,000 to planters for peanuts this season, and large shipments have been made from other towns in Lincoln parish, selling for about \$1 per bushel.

"This is a striking illustration of the easy adjustment of the Southern farmer to the changed conditions of agriculture involved by the boll-weevil, and illustrates his courage in tackling a crop for which he had no assurance of an adequate demand. The immense demand for Professor Blakeslee's pamphlet on peanut culture, to be distributed to the farmer by the cottonseed oil men in order to stimulate peanut raising, is almost conclusive proof that the mill men have resolved on crushing peanuts as a settled policy. The price of \$1 per bushel seems small, but at from 80 to 100 bushels and more per acre that seems a very enticing crop."

Since diversified farming is now an established principle in the cotton States, and the demand for peanuts as a stable article of commerce is likely to be largely increased by the prospective action of the oil mills in using them for oil production, it is evidently the opportune time for a thorough examination of the subject by those interested.

A \$300,000 Plant for Baltimore.

The Baltimore Gas Appliance & Manufacturing Co. of Baltimore has been organized with \$300,000 capital stock to manufacture gas stoves and appliances. It has leased a plant at Bayard and Wicomico streets, will remodel the buildings and install new machinery. An initial annual output of 30,000 gas ranges, 15,000 gas water heaters, etc., is proposed. H. W. Hunter is president; D. C. Ammidon, vice-president-treasurer; Norman James, secretary, all of Baltimore. Martin W. Longfellow of Hamilton, O., will be general superintendent.

A \$1,000,000 Capital Increase.

The Continental Gin Co. of Birmingham telegraphs the MANUFACTURERS RECORD that the corporation has increased its capital stock from \$2,000,000 to \$3,000,000 and made liberal appropriations for improvements at its various plants. These plants are equipped especially to manufacture cotton gins and similar machinery. Details of the plant betterments have not been announced.

Galveston Builders Elect Officers.

At a meeting of the Galveston (Tex.) Builders' Exchange last week the following officers were elected: M. C. Bowden, president; C. G. Wolfer, vice-president; Edward F. Drewa, secretary; Robert Paliser, treasurer, and John Peterson, sergeant-at-arms.

Of Interest to Architects.

The Board of Trustees, State Baptist Convention, Rev. Louis Bristow, secretary, Abbeville, S. C., invites architects to submit plans and specifications January 30 for administration building. The amount available is \$75,000.

Gray Ore Co., of which Col. T. G. Bush was president, quite successfully, but a fair test was not made of it, because, unfortunately, we could not get a sufficient quantity to make it a very great part of the burden, and used it only as a part of the regular brown ore carried, but with very gratifying results.

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Light castings, stove plate, \$8.50 to \$9.
The Bessemer Castings Co. of Bessemer, Ala., G. G. Neal, secretary-treasurer, has leased the plant of the Smith Manufacturing Co. and will engage in the manufacture of light castings and stoves.

After having been out of operation for some time, the plant of the Bessemer Pipe some time, the plant of the Beggs Pipe been put in operation again.

Lake Mattamuskeet Drainage.

The Southern Land Reclamation Co. has been incorporated to undertake the Lake Mattamuskeet drainage improvement, to which the MANUFACTURERS RECORD has previously referred. Its incorporators are D. N. Graves of Boston, W. T. Mason, J. P. Kerr and Charles A. Webb of Asheville, N. C. Mr. Graves will be president and general manager, and summarizes the enterprise in a telegram to the MANUFACTURERS RECORD as follows:

"Mattamuskeet drainage district, in Hyde county, North Carolina, comprises approximately 50,000 acres of land in the lake and 50,000 acres surrounding the lake. This lake is to be pumped out and the lake bed and surrounding land will be ditched for carrying water to a central pumping plant (costing about \$180,000), comprising two 24-inch, two 48-inch and six 60-inch centrifugal pumps with a capacity of 2000 cubic feet per second.

Total cost of drainage will be \$400,000. This will be the largest area of any body of water so drained and the largest pumping plant for such purpose in the world. The lake was purchased from the State Board of Education by the Southern Land Reclamation Co."

Special correspondence from Raleigh to the MANUFACTURERS RECORD says:

"The State Board of Education sold the 49,000 acres covered by Lake Mattamuskeet in Hyde county for \$90,500 to the Southern Land Reclamation Co., which today obtained charter and which is to expend \$300,000 more in draining the lake bed. The latter is 15 miles long and six wide, is very shallow, with a soil of rich peat underneath as black as ink, the adjacent territory, including 75,000 acres, being of the same type. It will cost \$400,000 to drain the lake and the adjoining territory. There will be an immense pumping plant, and a basin will be made at the lowest part of the lake, into which will gather any water which may appear after great rains. An old canal from the lake to Pamlico Sound will be reopened and three others cut, and there will be a complete system of dykes and drainage ditches. The company which has bought the lake bed pays also about \$12,000, covering the expense incurred by the State Board of Education for the preliminary surveys and the formation of the greatest drainage district in the South. All the interests are together now, including the Norfolk & Southern Railway and its subsidiary corporation, the John L. Roper Lumber Co., and the various landowners. Everything is now arranged for the work to begin within the next 60 days, and the company will issue \$400,000 in bonds. The present plan is to complete the drainage in 18 months."

Paving at Abilene.

The 25,000 Club,
Abilene, Tex., January 13.

Editor Manufacturers Record:

Abilene is busily engaged at the present time in industrial improvements. The Bitulithic Company of Texas has charge of our business streets, and has 75 men busily engaged in grading the same preparatory to putting in the paving; \$150,000 will be expended in this work. E. L. Norton & Co. are putting on the finishing touches in laying the new enlarged water mains. R. H. Locke, who has the contract for curbing and surface drainage concrete work, is working a large crew of hands to make the streets ready for the paving company. John Barbican, contractor for concrete sewerage crossings, has completed more than one-half of his work, and will shortly have completed his contract. The electric-light people who have contract for putting in ornamental lights for the business district have received the metallic ornamental light poles, and so soon as everything is made in readiness will begin to lay the conduits for underground electric wires and set the poles. All poles of every sort will be removed from the business districts where paving is done.

B. E. LOONEY,

Secretary.

Rocky Mount Improvements.

Chamber of Commerce.

Rocky Mount, N. C., January 13.

Editor Manufacturers Record:

The new passenger station and office building of the Atlantic Coast Line Railroad, and also the Young Men's Christian Association building for Rocky Mount are no longer matters in the far-distant future, but the bids submitted in accordance with the plans made public have been opened and the award made to a local contracting firm, D. J. Rose & Co., the one recommended by Mr. J. F. Leitner of Wilming-

ton, the architect who designed the buildings. Not only was the local contractor the recipient of the awards for the construction of the two buildings for Rocky Mount, but he will build the Young Men's Christian Association buildings at Florence, S. C., and Waycross, Ga., as well. It is expected that the ground will be broken at an early date for the buildings in this city, and the work will go merrily on to an early completion of the two buildings, which in every way will be a credit to our city. The two improvements noted will cost in the neighborhood of between \$55,000 and \$60,000. The Young Men's Christian Association building is a most generous gift to the people of Rocky Mount from the Atlantic Coast Line, and is in keeping with the decided progressive spirit of this most enterprising system.

JOHN L. ABBINGTON,

Business Manager.

Big Texas Iron and Steel Company.

The Dallas Coal, Iron & Steel Co. has been incorporated with a capital stock of \$2,500,000, and plans the development of iron and steel manufacture at Jefferson, Tex. It has purchased the Jefferson Iron Co.'s properties, including 7000 acres of Marion county iron lands (purchased last spring from the Lone Star Iron Co.) and the Jefferson furnace, with an annual output of 35,000 tons of foundry iron. This furnace is to be remodeled and augmented by the addition of brick stoves, while it is contemplated to build two 50-ton open-hearth units, a billet mill and a merchant mill for rolling bars and cotton ties. The Jefferson Iron Co. has been controlled for several years by interests identified with the De Camp Brothers & Yule Iron, Coal & Coke Co. of St. Louis, whose purchase of it was reported by the MANUFACTURERS RECORD, and who are represented in the new corporation. The latter has organized with the following officers: President, R. D. Yoakum, third vice-president of the Quannah, Acme & Pacific Railway Co., St. Louis; vice-president and chairman of the executive committee, J. W. Wright; secretary, R. P. Wafford; treasurer, F. J. Schoelkopf, each of Dallas, Tex. The directors are Messrs. Yoakum, Wright, Wafford, Schoelkopf, L. Lipsitz, A. L. Clark, T. L. Camp, A. P. De Camp and W. F. McClurg. The last named is in charge of the plant at Jefferson.

Georgia-Florida Sawmill Association.

The January meeting of the Georgia-Florida Sawmill Association was held at Ocala, Fla., last week, at which the report of the committee appointed to investigate proposed changes in the grading rules, together with the work of the Southern Pine Inspection Bureau, was considered. The report recommends changes in rules in amount of wane allowed on sizes nine inches and over, and that a certain per cent. of rejection be allowed at \$2 per thousand less instead of going into the class below. On prime merchantable and standard 10 per cent. is allowed at \$2 per thousand less instead of going into a lower grade. It was recommended that the Southern Pine Inspection Bureau be taken over free of debt by the Georgia-Florida Sawmill Association, and that it be handled and controlled directly by the association. The report of the committee appointed some time ago to amend the grading rules on planing-mill stock and "roofers" was adopted. As amended these rules will allow shorter lengths, the basis being 8 to 20 instead of 10 to 20 feet, as formerly, with the percentage of still shorter lengths. The next meeting of the association will be held at Jacksonville on February 13.

Remunerative Peanuts.

The prospective value of peanut cultivation in the diversified farming of those States of the South that have not previously given attention to the peanut as a profitable product is illustrated by the results in those localities where this season's crop has just been marketed. References have been made recently in the MANUFACTURERS RECORD to the advantages of cottonseed-oil mills in devoting their dull season to the production of peanut oil, and the general merits of this oil. The Modern Sugar Planter, referring to the present season, says that the banks of Ruston, La., have paid out more than \$30,000 to planters for peanuts this season, and large shipments have been made from other towns in Lincoln parish, selling for about \$1 per bushel.

"This is a striking illustration of the easy adjustment of the Southern farmer to the changed conditions of agriculture involved by the boll-weevil, and illustrates his courage in tackling a crop for which he had no assurance of an adequate demand. The immense demand for Professor Blakeslee's pamphlet on peanut culture, to be distributed to the farmer by the cottonseed oil men in order to stimulate peanut raising, is almost conclusive proof that the mill men have resolved on crushing peanuts as a settled policy. The price of \$1 per bushel seems small, but at from 80 to 100 bushels and more per acre that seems a very enticing crop."

Since diversified farming is now an established principle in the cotton States, and the demand for peanuts as a stable article of commerce is likely to be largely increased by the prospective action of the oil mills in using them for oil production, it is evidently the opportune time for a thorough examination of the subject by those interested.

A \$300,000 Plant for Baltimore.

The Baltimore Gas Appliance & Manufacturing Co. of Baltimore has been organized with \$300,000 capital stock to manufacture gas stoves and appliances. It has leased a plant at Bayard and Wicomico streets, will remodel the buildings and install new machinery. An initial annual output of 30,000 gas ranges, 15,000 gas water heaters, etc., is proposed. H. W. Hunter is president; D. C. Ammidon, vice-president-treasurer; Norman James, secretary, all of Baltimore; Martin W. Longfellow of Hamilton, O., will be general superintendent.

A \$1,000,000 Capital Increase.

The Continental Gin Co. of Birmingham telegraphs the MANUFACTURERS RECORD that the corporation has increased its capital stock from \$2,000,000 to \$3,000,000 and made liberal appropriations for improvements at its various plants. These plants are equipped especially to manufacture cotton gins and similar machinery. Details of the plant betterments have not been announced.

Galveston Builders Elect Officers.

At a meeting of the Galveston (Tex.) Builders' Exchange last week the following officers were elected: M. C. Bowden, president; C. G. Wolfer, vice-president; Edward F. Drewa, secretary; Robert Pallmer, treasurer, and John Peterson, sergeant-at-arms.

Of Interest to Architects.

The Board of Trustees, State Baptist Convention, Rev. Louis Bristow, secretary, Abbeville, S. C., invites architects to submit plans and specifications January 30 for administration building. The amount available is \$75,000.

CURRENT EVENTS AS VIEWED BY OTHERS.

CHARLESTON COUNTY DRAINAGE.

[Charleston News and Courier.]

The report for the year 1910 of the Sanitary and Drainage Commission for Charleston County was issued yesterday. The report is issued in the form of a neat pamphlet, bound in green paper and illustrated with a number of good photographs showing the results accomplished by the commission in drainage and good-roads work in St. Andrew's parish and on Charleston Neck. In part the report is as follows:

"Our drainage work during the past year has been confined nearly altogether to St. Andrew's parish, where we are completing Drainage System No. 2 in this parish, extending from Wappoo road to the Atlantic Coast Line (Savannah division).

"In this territory what is known as the 'Rantowles road' runs for a considerable distance along the creeks and marshes forming part of the Stono River. In some places the road is bridged, permitting the salt water to run inland for a half mile to a mile, and in time of storm the salt water would overflow the agricultural lands in the neighborhood. To in a measure prevent this overflow we had placed under the road at Cherokee Creek a wooden trunk, 40x8x2, with floodgate, which closes as the tide rises and opens as the tide goes down; thus salt water is kept from overflowing the agricultural lands and the drainage water goes out through the trunk. This work is a striking example of what may be done in way of reclamation of salt-water swamps.

"Including the marsh land of part of Cherokee Creek and the bayous running from same, about 1000 acres at this location have been reclaimed at an expense of \$300 cost of the trunk and the additional cost of the canals through the land.

"In this section runs what is called the 'Savage road.' It is an old trail through the woods much used as a thoroughfare from the Rantowles road to the Magnolia Garden road. For years the only repairs done to same was by digging a trench on the sides and using the excavated earth to fill in the holes on the road, the result being that this road was lined on both sides with pools of stagnant water, breeding the malaria mosquito in vast numbers and making the entire adjacent territory unhealthy. We make special mention of this road to illustrate the difficulties sometimes encountered in our work, and the extra labor involved, for the only way in which we could make the section healthy was by ditching this road and digging outlets for the water, which practically amounted to the labor of building an entire new road. Another notable instance of our work is the draining of a moat surrounding a redoubt built during the Civil War. For nearly 50 years this moat has been full of stagnant water and a great menace to the public health. It seemed to be nobody's business to drain same, so there it would perhaps remain for years a cesspool, breeding deadly disease, were it not for the work of this commission. In addition to our drainage work in this parish, we are improving the public roads. The linear feet of ditching done by our force at this stockade during the year 1910 is 74,801, or about 15 miles."

The report here states that the shell road from the Charleston bridge is in very bad shape and urges that it be repaired.

"With our drainage system we have made the land healthy. Before settlers

could be had it was found that the roads had to be improved. This has also been done by this commission as far as its authority permitted, and to round out and complete our work to the end that the greatest benefit will accrue to the city and county of Charleston it is necessary to bring white settlers upon these lands to inhabit and cultivate them. Nowhere in this world is a more balmy climate, nowhere is there more fertile soil, and yet a large area of the land is untilled.

"There may have been an excuse for this condition before these lands were drained upon the plea that a white man could not live upon them the entire year without grave danger to his health. But that excuse does not now exist, and still the land continues to be undeveloped. One of several reasons assigned is that these lands are held mainly in large tracts by owners who do not reside upon them, and who, not caring anything about the prosperity and progress of our county and State, return their holdings for assessment at a ridiculously low figure, rent out a few acres to negroes for a sufficient sum to pay the taxes and permit the balance to lie fallow, with the hope and expectation that the increased value of their lands will some day make wealthy either themselves or their descendants.

"In the West a farm of 40 acres is looked upon as ample for the support of one family. In California a successful experiment is being made with 10-acre farms, and by a system of intensive farming 10 acres have been found sufficient for the support of one family. There is no good reason why farms of the same size would not show as good results in Charleston county and in many parts of our Southland. A strong effort along these lines should be made in Charleston county, and the results cannot but be equally beneficial as those shown on equal size farms in other parts of the country."

THAT MOUNTAIN HIGHWAY.

[Atlanta Constitution.]

Prospects for a highway between Atlanta and Porter Springs, in Lumpkin county, intended as an opening wedge for better transportation facilities in the Georgia Blue Ridge, are climbing toward par.

First came news that Mayor C. H. Jones of Dahlonega, in Lumpkin county, was enthusiastic over the project and would do his utmost to insure co-operation in his vicinity.

The latest encouragement is from Dawson county, through which the road must pass to reach Lumpkin. It is in the form of a letter from Hoyt Brannon, cashier of the Farmers and Citizens' Bank of Dawsonville, who writes that "we are willing to co-operate with you in every way possible."

Such sentiments represent the spirit of achievement!

The thing now needed is indication of similar enthusiasm in Forsyth and Milton, the two other counties through which this highway must pass.

Neither has railroads or enjoys the advantages of adequate connection with the outside world. Both need transportation facilities badly.

If they have progressed in wealth and population, despite the absence of adequate avenues to civilization, what will be the result when a well-paved highway puts them in touch with every part of the State?

Surely public spirit and business enter-

prise are as alert in Forsyth and Milton as in Lumpkin and Dawson!

Were all four of these counties to unite in a plan looking to the completion and maintenance of the highway, the project could be materialized at an expense almost negligible so far as the respective counties are concerned.

The method originally proposed was the utterance of small bond issues for each county, arranged in such denominations and upon such terms as would visit no perceptible burden upon the taxpayers of any of them.

As the Constitution has shown, the assurance of cheap and easy access to these mountain counties by means of a highway passable the year round would in all probability be followed by the construction of trolley lines.

After them would come railroads in those counties where railroads could overcome engineering difficulties imposed by the Blue Ridge.

The immediate effect would be the transformation of that entire section of North Georgia into a summer resort country rivaling the White Mountain region of New England in beauty and in profit to the inhabitants.

Almost simultaneously would come a business quickening expressed in the development of natural resources, the ultimate dimensions of which are impossible of estimate.

There is no reason why the highway should not be well under way by next fall.

In the meantime, let us hear from Milton and Forsyth counties!

TEXAS CITY PLANS.

[Galveston (Tex.) News.]

Capt. A. B. Wolvin of Duluth, president of the Texas City Transportation Co., and associates are due in Texas City January 25 for the purpose of inspecting the company's properties and laying out the improvement work for 1911. The party will probably remain in Texas City several days.

As announced by Captain Wolvin on the occasion of his visit last fall, the Texas City Transportation Co. is planning to expend \$1,000,000 during 1911 in the enlargement of the terminal facilities. Another pier will be constructed, and at the coming meeting of the stockholders definite plans will probably be adopted and contracts let for the work. Other matters of importance to the support will probably also be finally disposed of while the party is in this section.

All arrangements have been completed for the expenditure of \$500,000 in townsite improvements by the Texas City Company. On December 31 a deed of trust was filed with the county clerk whereby the Texas City Company deeded to Augustus B. Peabody of Chicago, as trustee for the bondholders, all the real and personal property of the Texas City Company, the object being to secure the payment of \$500,000 bonds issued for the purpose of making townsite improvements. On Monday the county commissioners' court granted permits to the Texas City Company to construct and maintain water-works, lighting and sewerage systems. With the money provided for and privileges granted by the county nothing remains in the way of carrying out the improvements, and the work, in fact, is already under way. The electric power plant has been enlarged to furnish power for industrial enterprises and for lighting the city, and lines are now being extended

throughout the city. A gasoline power trench-digging machine has arrived and is ready to start the work of digging trenches for the sewers and water mains. Grading of the streets has been under way for some time.

The laying of water mains and sewers will commence on Ninth avenue north, extending from 10th street east to the bay shore. As soon as these are in place the avenue will be paved with gravel as a base and mudshell as a top surface. The street will be shelled from curb to curb, concrete curbs will be put in and a six-foot-wide cement sidewalk laid. Each avenue to the south will be improved in the same manner, as will the intersecting streets. How far south these improvements will be carried has not been finally determined, but it is announced as the intention of the company to place the improvements so as to serve the greatest number of people.

The work of building up the business section within what is known as the fire district is well under way. The Texas City Company's \$50,000 steel and concrete office building is practically complete and is now occupied by the Texas City Company and allied companies. The building is located on the northwest corner of 6th street and Eighth avenue north. On the northeast corner D. W. Tubb of Oakwoods, Tex., is building a two-story brick building to cost about \$6000. The foundations are now being put in. It will be 25x100 feet in dimensions. On the northeast corner of 6th street and Seventh avenue north, W. A. Malin of Houston is building a two-story brick building having a frontage of 125 feet on 6th street and 75 feet on Seventh avenue. The building will cost about \$15,000. The foundations are now being put in. B. A. Baldwin of Houston, it is stated, will let the contract next week for a two-story brick building on 6th street immediately north of the Malin building. This building will have a frontage of 125 feet on 6th street, and will extend back 110 feet. The structure will cost about \$18,000. One or two others who have purchased property on 6th street have announced their intention of building business blocks.

In the residence section a number of buildings are going up, it being claimed that there are now 75 in course of construction.

In the industrial district improvements are also being made. The Texas Cottonseed Co. has under construction a large building to house their cottonseed delinting and crushing plant. The company is investing about \$100,000. A lumber company is building a large shed. Several enterprises of more or less magnitude, it is claimed, have been secured and will be located in the industrial district, which lies west of 10th street and comprises about 800 acres.

At the docks the work of finishing up the first unit of the system of ocean terminals of the Texas City Transportation Co. is under way.

TO CUT THROUGH ROCK.

[Nashville Tennessean.]

The design for the construction of a new combined derrick boat and dredge to be used in excavating the rock shoals at what is known as Big Bend on the Tennessee River in the construction of a new three-mile channel soon to be begun at that point has just been completed in the office of United States Engineer W. W.

Harts and submitted to Washington for approval.

For the big channel, the plans also of which have just been mapped out, a cut must be made through rock for almost the entire distance, and the task represents one of the greatest river undertakings ever made in the work of Tennessee River improvement. The estimated cost is around \$500,000, and something like three years will be required for completion.

The channel when completed will be 150 feet wide and 6 feet deep for the entire distance, opening navigation the year round above that point. What is known as Big Bend, or the location of the channel, is a short distance below Riverton, Ala.

Above that point navigation has been possible for not more than six to eight months of the year, and the channel project is hailed with a welcome in the upper river section. The work is to be done under the general appropriations, and Major Harts is of the opinion that funds will be available as soon as the gates below Lock Riverton are completed, the same being now under contract.

The cost of the derrick and dredge, for which the design has just been completed, will be \$30,000. This is the third boat planned recently for use in the improvement of the river, two dredges having been contracted for a few weeks ago at a cost of \$35,000 each. It is the expectation that the three shall be completed within six months, when it is hoped that the channel cut may begin. The machinery contract for the two dredges is held by the Bucyrus Company of South Milwaukee and the Vulcan Steel Co. of Toledo.

VIRGINIA APPLES.

[Roanoke Times.]

Among those who were in Roanoke during Farmers' Week was Prof. H. E. Van Deman of Washington, D. C. Mr. Van Deman is an expert judge of apples. He is recognized as perhaps the leading authority on apples in America, and his services are constantly in demand in passing on the merits of exhibits and awarding prizes.

"I have known the fruits of Virginia for a good many years," he said. "I have been judge of fruits in Virginia and in many other parts of the country, in the West, in British Columbia and Ontario. I have seen exhibits of the very best fruits from those sections and also fruits from abroad, and I do not think Virginia has need to feel ashamed of what it has and of what it is doing. People of Virginia are in an apple paradise, and most of them do not realize it. The apple is the principal fruit which excels in Virginia and in which Virginia excels.

"Apples in boxes bring better prices than those in barrels. The average consumer does not want a whole barrel at one time, but he would buy a bushel box if he could get it. The box is the package that should be used for first-class grades. Of all the Eastern States, Virginia is taking the lead in learning to use the bushel box instead of the barrel.

"At the show in Roanoke some of the 400 or 500 boxes were packed as nicely as those from Oregon and Washington, and the display was beautiful. A good many having exhibits there are simply beginners, making their first effort, and, of course, their fruit did not come up to the standard, but they show a desire to do the thing right, and in time they will be able to do so. But they need instruction, and the State authorities under the direction of the Horticultural Society and experiment station and perhaps the State Board of Agriculture should give lessons in grading and packing. Packing schools should be established. Some of the greatest experts from the West should be secured to conduct

these schools, to give demonstrations. Such a policy undoubtedly would ultimately add largely to the wealth of the State. If the authorities will help the apple-grower, the returns to the State will be manifold. With such help the grower will be able to help himself. In the West they have regular packing schools and give certificates to those who pass the examinations. Unless the packer has such certificate his fruit does not receive the stamp of endorsement of the fruit-growers' association.

"The Roanoke exhibit this year showed a marked improvement over the exhibit last year at Winchester, and a very great improvement over the exhibit at Lynchburg two years ago.

"I repeat: People in Virginia, West Virginia and Maryland are living in an apple paradise and don't know it."

CREAMERIES PAY DIVIDENDS.

[San Antonio Express.]

Creameries are paying from 10 to 30 per cent. dividends in many sections of Texas, and this, without any other argument, should be sufficient to encourage those looking for good investments to plan such industries in this section.

Not only are creameries of benefit to the men who invest their money in them, but they are of equal or greater benefit to the farmers who are trying to raise a few fine cows. It is through the creamery that the little farmer or the dairyman on a small scale is realizing the greatest profits from his milk.

There is nothing that will do more to encourage the farmer in breeding fine cattle than to have a creamery within easy reach to take care of his surplus products. There is hardly a community in Southwest Texas where a creamery would not be a paying investment. This is a day of co-operation and of community interests. There is no valid reason for prosperous, intelligent and businesslike farmers waiting for outside capital to come into their section and establish a creamery. They should get together, provide the necessary funds and start the industry themselves, keeping dividends at home as well as realizing the increased profits which always results to the farmer from this method of disposing of his milk.

A fine example of what can be done where matters are taken hold of with determination is reported from Belton. The business men of Bell county, seeing the need of a creamery, promptly established one. Notwithstanding the last year was a rather dry one and conditions by no means the best, the creamery paid its owners 10 per cent. dividends, and there was sufficient profit left to pass 10 per cent. to the reserve fund.

This is an example which towns of Southwest Texas would do well to take note of.

MISSOURI WOOL.

[St. Louis Republic.]

"Year after year Missouri makes gains in the amount of wool it places on the market, although this is not a regular sheep-raising and wool-producing State. During 1910, 6,020,000 pounds of wool, washed and unwashed, were sold by the farmers and stock-raisers of the 114 counties, and the same brought \$1,435,770 in the scoured state. This clip, which filled 301 freight cars, allowing 20,000 pounds to the car, represents the fleece of 860,000 sheep. As the total head in Missouri, for the tax assessment of 1910, were 1,031,359, it left 171,359 head which were not sheared on the farm, probably being sent to market with their wool intact."

The above advance information from the 1911 Red Book of the Bureau of Labor Statistics was made public today by Labor

Commissioner J. C. A. Hiller. It forms a part of a chapter on "Missouri as a Sheep and Wool State," facts and figures for which have been gathered and prepared by Supervising Statistician A. T. Edmonston.

For wool Missouri ranks ahead of all States which touch its borders and surround it, namely, Illinois, Kentucky, Tennessee, Arkansas, Oklahoma, Kansas, Nebraska and Iowa. The 6,020,000 pounds credited to the State for 1910, when scoured were reduced to 3,190,600 pounds, but its value advanced from 22 cents a pound to 45 cents.

For the whole fleece, in the washed and unwashed state, the farmers received \$1,324,400, but the men who did the scouring were paid \$1,435,770 for the crop. This process of renovating and otherwise improving the wool added \$111,370 to its value. In addition the grease and chemicals which were washed and scoured out of the clip, if all were "recovered," had a good worth as by-products.

TOWN GROWTH IN THE PIEDMONT

[Columbia State.]

It is interesting to consider the census figures of Greenville and Spartanburg in relation to the textile industry. In the suburbs of Spartanburg and outside of its incorporate limits, but within three and a half miles of the center of the city, there are in operation 157,188 spindles, in six mills. In the suburbs of Greenville, within the same distance from the city's center, there are six mills with 334,400 spindles. If the American Spinning Co.'s plant, as to the location of which with reference to the city limits of Greenville we are not exactly informed, is outside of the city, 52,416 spindles are to be added to this number. Without this latter mill there are only 14,924 spindles within the city limits of Greenville, while within the city limits of Spartanburg there are two mills with 126,296 spindles. Thus it is pretty clear that if the mill population of Spartanburg lived so exclusively in the city's suburbs as does that of Greenville, the census figures of the two cities would show but slight difference.

Spartanburg, however, will make answer that if suburbs are to be considered, the radius should be extended six or eight miles, so that Glendale and Clifton might be held as suburban to Spartanburg. Then, in a short time, so soon as the trolley lines now projected are completed,

Greenville may claim Piedmont, and even Pelzer.

The truth is that villages and big towns are coming to be strung so close together from Spartanburg to Greenville and on toward Anderson that the whole district may be one continuous urban community before many years have passed, and which incorporated town has the largest population will then have little significance.

TEXAS TOMATOES.

[Orange Leader.]

During 1910 1800 carloads of fresh tomatoes were marketed in Texas, most of them being shipped to points in the North and East. The tomatoes put \$1,400,000 into the pockets of the farmers who produced them, with practically no extra cost for cultivation, as in most cases they are planted with other winter crops, thereby requiring very little extra work.

The one dark spot on this bright agricultural picture, however, is the fact that these tomatoes were shipped to the canning factories of Maryland and other States, only to be shipped back again for consumption by Texans, who have to pay the freight both ways. With a production of over a million carloads of tomatoes alone, not to mention thousands of cars of other truck annually, and with cheap fuel in abundance, and all other requisites for the building of factories, the shipping of our products to other States to be canned is not in keeping with the spirit of progress which is manifested in other lines of Texas industry.

FOR GREATER HOUSTON.

[Houston Post.]

The Houston ship channel and Main-street viaduct bond issues were approved by the citizens of Houston and Harris county at the special election January 10, thus providing \$1,750,000 for these improvements, in addition to \$1,250,000 already appropriated by Congress, making \$2,500,000 available for the ship channel and \$500,000 for the viaduct to connect the two great business districts of the city north and south of the ship channel. Work on the ship channel and viaduct will begin immediately and be completed as soon as possible.

Samples of Phosphate Rock.

E. L. Fowler, Box 201, Tulsa, Okla., writes the MANUFACTURERS RECORD that he wants samples of Southern phosphate rock.



ANSON MILLS OFFICE BUILDING AT EL PASO.

Under construction; cost \$260,000; reinforced concrete construction throughout; exterior walls, cornice and ornaments of reinforced concrete; inside floors and base of cement finish; no granite, brick or terra-cotta used on exterior; dimensions, 80x165 feet; 12 stories and basement; electric elevator; architects, Trost & Trost of El Paso; contractors, H. L. Stevens & Co. of Kansas City.

Literary Notes.

Modern Manufacture of Portland Cement.

By Percy C. H. West, Fellow of the Chemical Society, and of the Society of Chemical Industry. 262 pages, 154 illustrations and numerous tables. Is $9\frac{1}{2} \times 6\frac{1}{2} \times 1\frac{1}{2}$ inches. Published by McGraw-Hill Book Co., New York; Crosby Lockwood & Son, London, 1910. Price \$4 net.

The rapid expansion of the industry of cement manufacture finds the industry with the least available practical literature of any of the manufactures. The testing and uses of the various cements have been rather fully treated, but the process of manufacture has been little written about. The volume above referred to presents a description of the modern machinery employed, with many illustrations and complete descriptions of the machinery, as well as the process employed.

As the particular process and machinery most applicable in particular cases depends on local conditions of material, the use to which the finished product is to be applied and the quality of labor obtainable for the manufacture, the author has characterized his statements with only that degree of positiveness which will permit the reader to use his own judgment where discrimination is necessary.

As the manufacture of cement in the United States has made such enormous strides in the last decade, this volume should prove especially interesting and valuable.

In a second volume, soon to be issued, the author will deal with the chemical and physical testing of the raw materials and finished product, and the scientific side of the subject treated at length.

Composition and Heat Treatment of Steel. By E. F. Lake. Publisher, McGraw-Hill Book Company, New York.

Without entering into details on the subjects of ores, their melting down into iron or refining the iron and steelmaking, the author has merely covered them in a general way in order to give a better understanding of the effects of the elements present in and added to steels of the various grades and kinds. He has endeavored to cover all the materials that have been used, either commercially or experimentally for the purpose of making better steel and improving the standard brands, so that they will have greater strengths, will withstand strains and stresses better, will possess a longer wearing surface, will have a greater electrical resistance, conductivity or magnetism, will attain a greater hardness, ductility, resiliency or malleability, will be capable of taking larger cuts on other metals or machining them faster, will produce a metal that can be easily rolled, hammered, pressed, drawn, forged, welded or machined into shape, or will be non-corrosive, and, in fact, make a better metal for any of the many uses for which it is intended. In separate chapters he discusses the making of pig-iron, the Bessemer, open-hearth and crucible processes of steelmaking, electric furnaces for steelmaking, ingredients of steel, working steel into shape, furnaces and fuels for heat treatment, annealing, hardening and tempering steel and carbonizing it.

The Gates of Twilight. By H. E. Harman. Publisher, Stone & Barringer Company, Charlotte, N. C.

Out of the South comes this volume of verses, artistic in its setting and in its text full of the feeling that must find vent in rhythm. The author has a lyre with many strings, and he touches them all effectively, with the result that the volume must appeal to a large audience.

GOOD ROADS

WEEK'S HIGHWAY RECORD.

Progress in Southern Road and Street Improvement.

[Full details of highway undertakings are given in the Construction Department.]

Bonds Voted.

Aransas Pass, Tex.—City has voted an issuance of \$20,000 of bonds for street improvements.

Independence, Mo.—Jackson county has awarded a \$3000 contract for road grading.

Wichita Falls, Tex.—City has voted an additional bond issue of \$25,000 for street paving.

Bonds to Be Voted.

Cookeville, Tenn.—Putnam county will vote February 25 on issuing \$100,000 of additional bonds for road improvements.

Parkersburg, W. Va.—Wood county will vote February — on issuing \$175,000 of bonds for paving about 10 miles of road.

Thomaston, Ga.—Upson county will vote February 13 on issuing \$100,000 of bonds for road improvements.

Contracts Awarded.

Amherst, Va.—Amherst county has voted to issue \$135,000 of bonds for road improvements.

Fort Worth, Tex.—City has voted to issue \$165,000 of bonds for street improvements.

Palatka, Fla.—City has awarded contract for street paving, curbing, etc., to cost about \$16,000.

St. Petersburg, Fla.—City has awarded contract for removing 15,000 cubic yards of earth; 40,000 square yards paving with bricks laid flat; 5000 square yards of paving with bricks laid on edge; 43,000 linear feet of granite curbing.

Contracts to Be Awarded.

Accident, Md.—Garrett county will construct road to cost about \$1500.

Augusta, Ga.—City will receive bids January 23 for stone curbing and cement sidewalks.

Baltimore, Md.—City will receive bids until January 25 for grading and paving four streets.

Chattanooga, Tenn.—City will invite bids for vitrified brick, asphalt, etc., in various streets.

Dallas, Tex.—City will pave and grade various streets.

Easton, Md.—City will improve streets.

Grand Saline, Tex.—City will lay concrete sidewalks.

Hillsboro, Tex.—City will receive bids until January 24 for 31,500 square yards of paving and 12,711 linear feet of combination curb and gutter.

Joplin, Mo.—Good Roads Committee will construct macadamized road.

Mexia, Tex.—City will undertake additional street improvements, for which \$20,000 bond issue is available.

Newport, Tenn.—Coke county will receive bids until January 27 for grading about 18 miles of road and macadamizing about 35 miles of road.

Oklahoma City, Okla.—City will receive bids until January 23 for street asphalt paving, etc.

Tampa, Fla.—Tampa Bay Land Co. will receive bids until February 7 for grading and paving $3\frac{3}{4}$ miles of road.

Tuscaloosa, Ala.—City will receive bids until February 2 for construction of 19,000 square yards of brick, wood block, sheet asphalt or bitulithic pavement.

Tulsa, Okla.—City will receive bids until January 27 for paving and other street improvements.

Extensive Road Contract.

Coke County Pike Commission, George W. Gorrell, secretary, Newport, Tenn.,

will receive bids until January 27 for grading about 18 miles of roads and macadamizing about 35 miles of roads. Bids are to be submitted on plans and specifications in accordance with plans and specifications on file in the office of the county engineer at Newport. That this is an extensive contract is evidenced by the figures mentioned.

Egyptian Cotton.

Although the United States is the greatest cotton-producing country in the world, a large quantity of this staple is imported from Egypt every year. The variety of cotton most extensively grown in Egypt is known as the Mit Afifi; it has a soft, rather crinkly fiber of a characteristic light brown color that renders it especially useful for certain classes of cotton goods in which the natural color of the fiber is retained.

The best Egyptian cottons bring a price second only to that paid for the highest grades of Sea Island, being used solely in the manufacture of the finest goods. They are especially suitable for mercerizing, taking this process better than the native American cottons, and are largely used for mixing with silk and for the manufacture of cloths in which a high finish and luster are required. In 1909 the import of cotton from Egypt amounted to 72,617,893 pounds, valued at \$12,101,000.

In view of the considerable value of this import, the United States Department of Agriculture is endeavoring to develop Egyptian cotton culture in the United States in order to supply the American market with a home-grown product. As a result of experiments that have been carried on for the past seven years in acclimatizing and breeding Egyptian cotton in the Southwest, several distinct types have originated from the stock of imported seed of the Mit Afifi variety with which the work was begun. Two of these are as distinct in the characters of the plants, bolls and fiber as some of the newer varieties which have originated in Egypt from the Mit Afifi. A third promising type is an improved acclimatized strain of Mit Afifi rather than a new variety.

A description of the leading characteristics of these promising varieties and strains and the methods followed in the plant-breeding work, as well as a brief account of the general progress of the acclimatization experiments with Egyptian cotton during the year 1909, is given in Bulletin 200 of the Bureau of Plant Industry, entitled "Breeding New Types of Egyptian Cotton," recently issued by the United States Department of Agriculture.

Spinners who have examined samples of the acclimatized Egyptian fiber grown last year in the Southwest pronounce it to be in every way as well adapted to their requirements as is the imported cotton of corresponding grades.

New Fertilizer Plants Completed.

The Catawba Fertilizer Co. has completed its plant at Lancaster, S. C., and has begun operations with day and night forces. The plant is modern in its design, construction and equipment, and is electrically driven. Its daily capacity is 160 tons of acid and 300 tons of bagged fertilizer. Officers of the company are John T. Stevens, president; Leroy Springs, vice-president; L. C. Lazenby, secretary; W. S. Fishburne, superintendent, and M. S. Witherspoon, manager of sales.

The Pamlico Chemical Co. of Washington, N. C., is completing its new plant near that city, and expects to begin operations within a few days. This plant is modern in design and construction, and will manufacture high-grade fertilizers.

RAILROADS

[A complete record of all new railroad building in the South will be found in the Construction Department.]

EXTENSIVE IMPROVEMENTS.

About \$1,000,000 on New Work to Be Spent by Santa Fe in Texas.

The Gulf, Colorado & Santa Fe Railway, says a report from Galveston, Tex., where the headquarters of the company are situated, has prepared a budget of proposed improvements to be made this year at a cost of more than \$750,000, and, in fact, about \$1,000,000.

F. G. Pettibone, vice-president and general manager, is quoted as stating the figures, of which \$150,000 will be devoted to work at Galveston, which will include track changes in the Galveston yards at 42d street, \$15,000; construction of a new 16-stall brick and concrete engine-house, \$40,000; a new standard sandhouse, \$1750; a new 60x100 brick machine and blacksmith shop, with boiler-rooms, \$8000; a new standard 85-foot turntable and motor, \$7500; a new oilhouse and storehouse, with office and platform 70x100, \$17,000, and new wooden sidewalks in coach-cleaning yard, \$300. About \$10,000 will be spent for tools and machinery. The buildings will be of either brick or reinforced concrete.

The total amount to be spent is in addition, it is stated, to work that is already under way, and it will be distributed at various points along the system. Besides this, it is said that about \$300,000 will be spent for ballasting and other betterments to the permanent way.

LINE ACROSS FLORIDA.

Company Organizes to Build from Tampa to Miami at an Early Date.

A dispatch from Tampa says that application will be made to charter the Atlantic, Okeechobee & Gulf Railroad Co., to build a line across the peninsula of Florida southeast from Tampa to Miami, about 250 miles, and that work is to begin within six months. Survey will be made immediately. The president of the company is H. C. Ferriott of New Orleans, and the directors include former United States Senator W. H. Milton, Robert L. Riley, Walter Graham, A. H. West, W. S. Jordan, E. E. West, the Broward Land Co., Daniel A. Simmons and J. O. McPherson.

The formal notice of application for charter shows that the vice-presidents are Messrs. Riley, Graham and A. H. West. Mr. Milton is treasurer; Mr. Simmons, secretary, and Francis B. McGarry, general counsel. Mr. Milton's address is Marianna, Fla.; Mr. Simmons', Jacksonville. Mr. Graham resides at Arcadia, Mr. Jordan, Mr. West, Mr. Riley, Mr. McGarry and Mr. McPherson at Jacksonville.

Several branches are contemplated, including one from Melbourne to Fort Myers and thence back toward Tampa; also from Bassinger to St. Cloud. The application will be made February 18.

NORTHERN TEXAS TRACTION.

Expenditures of \$1,000,000 to Be Made in and Around Fort Worth.

G. H. Clifford, manager of the Northern Texas Traction Co., Fort Worth, Tex., is reported as saying that the increase of the company's capital stock by \$1,000,000, which will make the total capital \$4,500,000, will be expended for improvements, including substations at Dallas and Fort Worth, the completion of the power station at Handley, which when finished will double the electric generating capacity of the plant, and other work. An extension from Fort Worth to the permanent loca-

tion of the Texas Christian University is needed, and much is also required (about \$500,000) for expenses in connection with paving in Fort Worth. The main line in Oak Cliff is to be improved. Some of the improvements are under way, and others will soon be started. This progressive work is made necessary to accommodate the growing business of the company as a result of increasing population along the route.

New Equipment, Rails, Etc.

The Tennessee Packing & Stockyards Co., it is reported from Nashville, Tenn., has ordered 25 refrigerator cars from a Chicago manufacturer.

The Louisville & Nashville Railroad, says a dispatch from Birmingham, Ala., has ordered 30,000 tons of rails from the United States Steel Corporation's plant at Ensley, and work on the contract will begin immediately. The railroad company has under way some extensive new construction, besides some important second track and revision work. Another report says the order may reach 72,000 tons.

The Vandalia Railroad (Pennsylvania system) is reported in the market for 150 freight cars.

A dispatch from Philadelphia says that the Pennsylvania has ordered 1000 steel hopper coal cars for replacements thus: Cambria Steel Co., Cambria, Pa., 600; Pressed Steel Car Co., Pittsburg, 250; American Car & Foundry Co., St. Louis, 150.

The St. Louis Southwestern Railway is reported to have ordered 500 furniture cars and 1500 box cars from the American Car & Foundry Co.

The Kanawha & Michigan Railway is reported contemplating the purchase of 2000 coal cars.

The Springfield Traction Co., Springfield, Mo., is reported considering the purchase of six double-truck motor cars.

The Charleston Consolidated Railway & Lighting Co., Charleston, S. C., is reported getting prices on six single-truck cars, fully equipped.

The Norfolk (Va.) City & Suburban Railway, says a market report, has purchased two passenger cars from the J. G. Brill Company, Philadelphia.

The Missouri Pacific Railway is reported to have ordered 2000 freight cars from the American Car & Foundry Co.

The Missouri, Oklahoma & Gulf Railroad, says a dispatch, has ordered five locomotives from the Baldwin Locomotive Works, Philadelphia.

Hopkinsville to Guthrie, Ky.

An officer of the Kentucky-Tennessee Traction Co. says that it has just received from the Arnold Company, of which Bion J. Arnold is president, a very favorable report on the proposed interurban line from Hopkinsville to Guthrie, Ky., together with a general description of the territory to be served and the character of service proposed. Furthermore, it describes the equipment required and includes estimates as to the cost of construction and the earnings expected. The company furnishing this report are engineers and builders.

The official referred to further writes that private rights of way have been acquired by M. C. Forbes, trustee for the various parties interested as follows:

M. C. Forbes, president the Forbes Manufacturing Co. and the Mogul Wagon Works; Nat Gathier, president the Bank of Hopkinsville; T. J. McReynolds, vice-president and A. H. Eckles cashier the Planters' Bank & Trust Co.; Nat Dortch, general manager the W. S. Matthews Sons Company; John H. Bell of the J. H. Anderson Company; H. A. Keach, general manager the Keach Furniture Co.; Sam

Frankel, owner and proprietor Frankel Stores, all of Hopkinsville; J. W. Cross, cashier the Farmers and Merchants' Bank, Pembroke, Ky.; W. J. Dickinson of P. E. Bacon & Co., Model Roller Mills, Trenton, Ky.; R. F. Warren, cashier the Farmers and Merchants' Bank, Guthrie, Ky., and Chas. Van den Burgh, promoter, Toledo, O.

It is stated that the company has now reached a point where it will soon decide upon the bond issue necessary, will arrange for selling securities, will incorporate and will award contract for construction. Mr. Van den Burgh is general manager.

On the Key West Line.

The Florida East Coast Railway, according to a report from Fort Pierce, Fla., is rapidly completing the viaduct on its extension to Key West. The last pier of the big bridge at Moser Channel was completed on December 31. This viaduct consists of 320 spans of steel bridge work, each 80 feet long, and 19 spans, each 60 feet long, besides concrete arches. It is said that four miles of steel work on the extension have already been built. At Bahia Honda work has begun on a bridge which will have 13 steel spans of 125 feet each, 13 spans of 180 feet, one of 240 feet and 10 girder bridges 80 feet long. All the steel has been received excepting that for the largest span. Between Knights Key and Pigeon Key considerable work has been done on the bridge over Pigeon Key Channel, and with the completion of the piers for the Moser Channel viaduct on the other side of Pigeon Key the forces for pier erection were transferred to Pigeon Key Channel. It is expected that the piers at this point will be completed in the spring, but there are to be erected also 225 arches, which will take nearly a year to finish. Other important work to be completed is at Pacit Channel. At Boca Chica a concrete arch viaduct has been erected about a mile long, and a similar viaduct is being finished at Big Pine Channel. Terminal construction is to be started at Key West within a few weeks.

Double Track on the Southern.

The Southern Railway Co. will secure an addition of practically 10 miles to the double track on its main line between Washington and Atlanta by the construction of second track just authorized south of Franklin Junction, Va. The new track will be connected with second track already laid to Whittle, which has never been used. When the new stretch is completed the five miles of single track between Franklin Junction and Sycamore will be operated as a gauntlet under absolute block, thus giving all the protective features of double track, as no train will be permitted to enter either end of the gauntlet while another is on it.

The 28-mile stretch of double track extending from Montview to Sycamore will be increased to a 50-mile stretch by this addition and the completion of the 12 miles from Montview to Monroe through Lynchburg, which is just going into service. The facilities for handling traffic over this important line will therefore be materially increased.

The completion of the Lynchburg improvement gives the Southern 239 miles of double track in the 648 miles between Washington and Atlanta, and the improvement between Franklin Junction and Whittle will bring the total of double track to 249 miles.

Port Bolivar Iron Ore Railway.

Rapid progress has already been made looking toward the completion of the Port Bolivar Iron Ore Railway, now under construction from Longview, Tex., northward to iron-ore fields. As previously reported,

the general contract for the work was let last month, and now subcontracts have been awarded for the entire 30 miles, which is the length of the first section to be built. The road is chartered to build farther on into the ore country, but this is as much as will be undertaken immediately.

Col. L. P. Featherstone of Galveston, Tex., president of the company, is quoted as saying that with the present rate of progress maintained the line will be in operation by July 1. It is estimated that the grading contract will be finished by May 1. Since December 15, when the contracts were let, all right of way has been obtained and more than 200 teams put at work. Recently contracts were awarded for bridge material and other supplies.

Galveston's New Union Station.

A report from Galveston says that the proposed new union station will cost not less than \$200,000. It will be to the left of the present station, which will be taken into the new building and form the north wing thereof. Strand street is to be closed from 25th to 28th street to enable the plans to be carried out. The station will be a long building with wings on the north and south, respectively. The present waiting-room, 52x88 feet, will become the colored people's waiting-room in the completed building. The main waiting-room to be erected will be 64x100 feet. There will also be a waiting-room for immigrants 28x32 feet, and other apartments, such as lavatories, barber shop, ticket offices, baggage-rooms and all the facilities necessary for a railroad terminal. A new restaurant apartment, will be provided 31x54 feet. The structure will be commodious and handsome.

The Macon-Atlanta Railway Plan.

According to a report from Macon, Ga., the question of building the long-contemplated interurban railway between Macon and Atlanta depends upon the business success of the Central Georgia Power Co., which is building a large hydro-electric plant on the Ocmulgee River to furnish power for manufacturing, lighting and other purposes. It is further stated that A. B. Leach of A. B. Leach & Co., New York; W. J. Masee of Macon, president of the Central Georgia Power Co.; M. F. Hatcher, vice-president, and J. J. Cagney, general manager, have recently inspected the work on the river and found it satisfactory. The dam will furnish 6000 horse-power to Macon alone. Other places also to be served are Griffin, Barnesville, Forsyth and Monticello. Notwithstanding these calls for service from the power plant, it is said that there will be sufficient power remaining to operate the proposed railway, which will be about 85 miles long.

South Atlantic Transcontinental.

A recent dispatch from Waterville, N. C., said that construction forces for the South Atlantic Transcontinental Railroad had started work near there in the mountains to get through a pass, and furthermore that the Tennessee & North Carolina Railroad was also working through the same route.

Since then President S. A. Jones of the Transcontinental, who resides at Waynesville, N. C., has been quoted in a report from Asheville as saying that there is no friction between the two roads, and that it is merely the purpose of his company to build its line in accordance with its plans, and the work is to be continued until the road is finished. McArthur Bros. of Chicago are the contractors, being represented by C. J. Lantry.

Station and Office Building.

The Frisco system, says a report from Joplin, Mo., contemplates the erection

there of a passenger station and office building on the southeast corner of 6th and Main streets. The improvement will cost about \$350,000, and construction is to begin in the spring. The site is 100x110 feet, and it is said the exterior of the building will be composed of white enamel brick. The basement, together with the first and second floors, will be used for the railroad station and other purposes of the company, but the rest of the building will be rented as offices. Train sheds will be erected. It appears that the fulfillment of the plans depends upon reaching a satisfactory agreement with the holders of subleases on part of the property.

Louisville & Eastern's Future.

Concerning the recent sale of the Louisville & Eastern Railway a report from Louisville says that the purchaser was T. J. Minary, who is president of the Louisville Railway and also of the Louisville Interurban; furthermore, that the purchased line will probably be operated in connection with the Louisville Interurban in the near future, and that the capital will be increased. The property includes 49 miles of electric railway, connecting Louisville, Lagrange and Shelbyville, besides land, franchises, buildings, power plant, rolling stock and other railway material. There are 15 passenger cars, six express cars, a motor car and a flat car.

Railroad Notes.

The Georgia, Florida & Alabama Railroad, says a dispatch from Atlanta, has been authorized to issue \$300,000 of bonds. This, it is said, will partly be used for covering the cost of a 27-mile extension and for purchasing equipment.

An officer of the Fitzgerald, Ocilla & Broxton Railway denies a report that the road has been purchased by the Atlanta, Birmingham & Atlantic Railway, but he says that an arrangement has been made with the latter under which, beginning January 1, it took over the operation of the line.

TEXTILES

[A complete record of new textile enterprises in the South will be found in the Construction Department.]

Jennings Cotton Mills.

The Jennings Cotton Mills of Lumberton, N. C., will be ready to manufacture yarns by March 15. This company's organization and plans were announced some months ago by the MANUFACTURERS RECORD. The buildings are completed and machinery, including 8000 spindles, is being installed. They include the following: Main mill, 131x464 feet; engine and boiler room, 80x90 feet; cotton warehouses; 40 operatives' cottages; superintendent's cottage, etc. Other construction includes a 50,000-gallon elevated water tank and a 125-foot smokestack. The Jennings plant will have a weekly capacity of 30,000 pounds of carded and combed American and Egyptian yarns wound on cones and tubes. Its cost will be about \$275,000. H. B. Jennings is president, and J. E. Sirrine of Greenville, S. C., is the engineer in charge.

The Westervelt Mills.

The Westervelt Mills of Greenville, S. C., has organized with the following directors: J. I. Westervelt, W. B. Smith, A. A. Jenks, L. M. Campbell, James C. Potter, J. H. Moyes, Frank Hammond, H. J. Haysworth and A. G. Furman. They have elected Mr. Westervelt as president and assistant treasurer, and A. C. Tatch as secretary. This \$1,000,000 company will proceed at once to build its proposed India lawn and linen mill of 50,000 spindles and

1200 looms, driven by 1500 electrical horsepower. All contracts have been arranged, as included in the detailed statement in the MANUFACTURERS RECORD of January 12.

The Dunson Mills.

The Dunson Mills of Lagrange, Ga., will organize with a capital stock of \$500,000 and the following officers: President, J. E. Dunson; vice-president, J. M. Barnard; general manager and treasurer, T. J. Thornton; superintendent, W. S. Dunson. Building plans are being prepared by J. E. Serrine of Greenville, S. C., and contracts will be awarded soon. Contract for spinning machinery have been awarded to the Whitin Machine Works of Whitinsville, Mass., and for looms to the Draper Company of Hopedale, Mass. This Dunson company was referred to last week. It will have 20,000 spindles and looms to match.

Castle Cotton Mills.

The Castle Cotton Mills of Monticello, Ga., has been organized with a capital stock of \$1,000,000 by Wm. T. Lang of West Point, Ga.; L. O. Benton, W. L. Kelly, D. N. Harvey and others of Monticello. This company will erect reinforced concrete buildings and operate by electricity. No further details have been reported.

The Hartwell Mills.

The Hartwell (Ga.) Mills have organized with John M. Geer, president; Waiter M. Geer, vice-president, both of Easley, S. C., and a capital stock of \$90,000. This company has purchased the Witham Cotton Mills, and will replace considerable old machinery with new equipment, as stated last week. It has 6032 spindles and 186 looms.

Enlarging the Knox Mill.

The W. & J. Knox Net & Twine Co. of Baltimore will erect an additional building. It has invited bids on the building, which will be a two-story 45x66-foot structure of brick and concrete.

To Manufacture Oilcloth.

The National Oilcloth Co. of St. Louis will incorporate with \$75,000 capital stock, and William Nesbitt will be president. It has leased plant buildings, and will install machinery for a daily capacity of 24,000 yards of oilcloth.

Textile Notes.

J. T. Fuller of Villa Rica, Ga., will establish the Fuller Knitting Mills. He was reported some months ago as to build a mill capitalized at \$10,000.

J. Calvin Hess of Philadelphia, Pa., is reported as planning the organization of a company to establish a hosiery knitting mill at Austin, Tex.

The recent report that the Prairie View Development Co. of Houston is locating a cotton-duck mill at Prairie View was an error. It is a white-duck glove and overall factory.

It is reported that Samuel Stevenson of Barnett, Miss., will establish a lace mill.

H. A. Emerson and J. A. Kemp of Wichita Falls, Tex., are interested in a plan to establish a cotton mill.

The Jackson Mills of Iva, S. C., propose to increase capital stock from \$120,200 to \$250,000. This company has an equipment of 21,504 ring spindles and 640 narrow looms for manufacturing brown sheeting.

The Brenham (Tex.) Cotton Mills proposes the organization of a \$100,000 stock company to take over the present company and put the plant in operation. This plant has 5600 spindles, 171 broad looms, etc., for manufacturing sheeting.

MINING

COAL IN 1909.

Great Increase in Production of Bituminous.

The statistics of coal production as collected jointly by the United States Geological Survey and the Bureau of the Census show that in 1909 the output amounted to 459,209,073 short tons. Compared with the record for 1908, when the production amounted to 415,842,698 short tons, the record for 1909 shows an increase of 44,039,650 short tons, or 10 per cent. All of the gain was in the production of bituminous coal, which increased from 332,573,944 short tons in 1908 to 378,551,024 short tons in 1909—a gain of 45,977,080 short tons. The production of anthracite in Pennsylvania decreased from 74,347,102 long tons (equivalent to 83,268,754 short tons) in 1908 to 72,015,222 long tons (equivalent to 80,658,049 short tons) in 1909.

Pennsylvania made the largest increase in the production of bituminous coal, showing a gain of 20,666,288 short tons, from 117,179,527 short tons in 1908 to 137,845,815 tons in 1909. West Virginia, for the second time in its history, exceeded Illinois, and became the second State in the production of coal, the former having an output in 1909 of 51,446,010 short tons, and the latter an output of 50,970,364 short tons. West Virginia's production increased 9,548,167 short tons over 1908. The output of Illinois, which stood third in rank, increased only 3,310,674. Ohio retained its position as fourth in rank, with a production in 1909 of 27,919,891 short tons, against 26,270,639 in 1908. Indiana, which in 1908 supplanted Alabama as fifth in rank, strengthened its position in 1909 by an increase of 2,566,809 tons, from 12,314,890 tons in 1908 to 14,881,699 tons in 1909, while Alabama gained 2,099,317 tons, from 11,604,593 tons to 13,703,910 tons. Other significant increases were in Colorado, 1,087,773 tons; Wyoming, 890,995 tons; Kansas, 734,270 tons; Montana, 640,082 tons; Iowa, 594,052 tons, and Washington, 551,463 tons. Georgia, Idaho, Maryland, Michigan, Missouri and Texas showed a smaller production in 1909 than in 1908, the total decrease amounting to about 750,000 tons.

The accompanying table shows the production in 1908 and 1909, by States, with comparisons. The figures for 1909 are subject to slight modifications, but are substantially complete:

Production of Coal, by States, in Short Tons.

State or Territory.	1908.	1909.	Increase (+) or decrease (—).
Alabama.....	11,604,593	13,703,910	+ 2,099,317
Arkansas.....	2,078,357	2,379,100	+ 300,743
California and Alaska.....	21,862	48,636	+ 26,774
Colorado.....	9,634,973	10,722,746	+ 1,087,773
Georgia.....	264,822	211,196	— 53,626
Idaho.....	5,429	4,553	— 876
Illinois.....	47,659,690	50,970,364	+ 3,310,674
Indiana.....	12,314,890	14,881,699	+ 2,566,809
Iowa.....	7,161,310	7,755,362	+ 594,052
Kansas.....	6,245,508	6,979,778	+ 734,270
Kentucky.....	10,246,553	10,648,981	+ 402,428
Maryland.....	4,377,093	4,037,343	— 339,750
Massachusetts.....	50	0	— 50
Michigan.....	1,835,019	1,783,692	— 51,327
Missouri.....	3,317,315	3,066,785	— 250,530
Montana.....	1,920,190	2,560,272	+ 640,082
New Mexico.....	2,467,937	2,908,325	+ 440,388
North Dakota.....	329,742	404,496	+ 74,754
Ohio.....	26,270,639	27,919,891	+ 1,649,252
Oklahoma.....	2,948,116	3,116,500	+ 168,384
Oregon.....	86,259	90,228	+ 3,969
Pennsylvania bituminous.....	117,179,527	137,845,815	+ 20,666,288
Tennessee.....	6,199,171	6,328,073	+ 128,902
Texas.....	1,895,377	1,824,440	— 70,937
Utah.....	1,846,792	2,268,481	+ 422,689
Virginia.....	4,259,042	4,756,045	+ 497,003
Washington.....	3,024,943	3,576,406	+ 551,463
West Virginia.....	41,897,843	51,446,010	+ 9,548,167
Wyoming.....	5,489,902	6,380,897	+ 890,995
Total bituminous.....	332,573,944	378,551,024	+ 45,977,080
Pennsylvania anthracite.....	83,268,754	80,658,049	— 2,610,705
Grand total.....	415,842,698	459,209,073	+ 44,039,650

Gold in 1910.

The South, which before 1849 produced most of the gold of the country, has now a small share in the output. The production by States in 1909 and 1910 is shown as follows:

	1909.	1910.
Alabama.....	\$29,200	\$29,416
Georgia.....	43,400	25,488
North Carolina.....	31,000	54,884
South Carolina.....	7,400	31,566
Tennessee.....	4,300	3,514
Texas.....	400	475
Virginia.....	4,000	558
Total.....	\$120,100	\$145,901
United States.....	99,673,400	96,055,214

Preliminary data compiled by H. D. McCaskey for the United States Geological Survey state that the value of the production of gold in the United States in 1910 fell below that of the record output of 1909, which was nearly \$100,000,000. Preliminary statistics compiled by the director of the mint indicate that in 1910 the value of the total production of gold in the United States (including Alaska and the insular possessions) was \$96,055,214, a decrease of \$3,618,186 from the value of the output in 1909, which was \$99,673,400.

Notwithstanding this decrease, which was chargeable mainly to reduced production in Alaska, Colorado and South Dakota, the decrease in the two latter having been due to merely temporary suspension of production in important camps, the gold-mining industry was on the whole and during most of the year progressive and in a satisfactory condition. Important increases in production are indicated for California, Nevada and Arizona, and smaller increases for New Mexico, North Carolina, South Carolina, Utah and Washington. Decreased output of gold is noted for Alaska, where the production from the Fairbanks and Seward Peninsula gravels has finally begun to decline; for Colorado, where operations in Cripple Creek mines until near the end of 1910 were somewhat less active pending the completion of deep drainage by the Roosevelt tunnel; for South Dakota, where the great Homestake and other mines and mills have made less than their normal yield owing to labor difficulties in the early part of the year, and for Idaho, Montana, Oregon and Virginia, where the decrease in output was less important. Other States show minor variations, and indeed the final figures may change somewhat the distribution of production given by the earlier figures. Reduced production from Alaska foreshadows a probable continued decrease for 1911, but this reduction may be to a considerable degree offset by production from new placer fields in Alaska and by increased activity in working auriferous lodes. With the prospect of further increase in production in Nevada, continued good results in California gold dredging, resumption of production at their full capacity of the mines at Cripple Creek and in the Black Hills, and with normal conditions elsewhere, the outlook for 1911 is good. Serious curtailment of copper production would, of course, affect the gold output, particularly in Montana and Arizona, but the total decrease from this cause would be relatively small, as the great bulk of the gold produced continues to come from placers and dry or siliceous ores.

Texas Phosphate.

Director W. B. Phillips of the University of Texas, bureau of economic geology and technology, writes:

"Some time ago there was received at this office a letter from a reputable mining man engaged in the phosphate industry stating that he had found phosphate rock in Texas that carried 82 per cent. of bone phosphate. This would be classed as extra high-grade material, much above the average of the rock from Florida,

Tennessee or South Carolina. This authority further stated that he had not been able to follow the discovery up or to locate the deposit. The rock was found as 'float' in a creek, but the time at his disposal did not allow him to prosecute the matter. At other localities he had found rock of fair quality, but not so good as the above. This bureau has not a dollar that can be spent in field work, nor does the State appropriate anything for such purposes. This discovery, so important for the farming interests of the State, remains undeveloped. It would require both time and money to investigate the different localities involved, but nothing can be done owing to an entire lack of funds.

"The same situation maintains in regard to nitrate of soda. Deposits of this valuable material have been found in Presidio county, where there is abundant water within three miles. This deposit has been known for several years, and it is also known that it exists on the lands of the Public School Fund. It has been prospected to some extent, and material of excellent quality has been uncovered. But we are in ignorance of the extent of the field, the thickness of the workable beds and the local conditions affecting the mining and treatment.

"Aside from certain deposits of nitrate of soda in Death Valley, Cal., which do not seem to be accessible now, there is no other locality in the United States as promising as this locality in Presidio county. All of the nitrate of soda of commerce comes from Chile. This country has a monopoly of the industry. The Texas deposits may or may not be of commercial importance, but while little is known concerning them, this little is decidedly encouraging."

Will Develop Coal Lands.

It is reported that the North American Company, 30 Broad street, New York, which controls the West Kentucky Coal Co., operating near Sturgis, Ky., has definitely decided to continue the development of its properties and will install facilities to increase the output of its mines from 500,000 to 2,000,000 tons annually. The properties embrace 26,000 acres of land, located in Crittenden, Webster and Union counties, and estimated to contain 200,000,000 tons of merchantable coal. The West Kentucky Coal Co. operates coal yards at Memphis, Tenn., and Paducah, Ky., and has a fleet of steamers and barges on the Ohio River.

To Mine Tennessee Graphite.

John N. Adams of Del Rio, Tenn., has been engaged as engineer for a corporation formed to develop graphite deposits claimed to run 6 per cent. of crystalline plumbago in a gangue of silicious sand and granite. He is to erect a plant to treat 20 tons of gangue daily, and is prepared to receive estimates for the installation.

The Frog Mountain Ore Lease.

Confirming a report of its lease of the Frog Mountain ore properties, as referred to by the MANUFACTURERS RECORD last week, the Anniston Iron Corporation of Anniston, Ala., states that the lease includes two ore-washing plants, two steam shovels, locomotive mine cars and other equipment. The ore lands embrace several hundred acres, and the production is from 2000 to 2500 tons of ore per month.

Coal-Handling Plant to Cost \$100,000

The Old Dominion Development Co., Mutual Building, Richmond, Va., and 71 Broadway, New York, which was reported last week as to install coal-handling ma-

chinery at Richmond and to develop a new mine on its property near that city, announces that it will expend about \$100,000 for the installation of its coal-handling plant to have a capacity of 1000 tons per day, and about \$90,000 to equip a new mine for a capacity of 1500 tons daily. The company is at present operating its Carbon Hill mine at a capacity of about 800 tons.

The McGregor Coal Co.

In connection with the plans of the McGregor Coal Co. of Charleston, W. Va., which recently incorporated with a capital stock of \$300,000 for the development of coal lands in Logan and Raleigh counties, the company states that it expects to begin the development of its Logan county property within the next 60 days, and later will develop the Raleigh county lands. The operation in Logan county will involve an expenditure of about \$300,000 for equipment and facilities, and the daily production will be about 2500 tons. Bids for machinery will be invited in the early spring.

The Price Coal & Lumber Co. of Lexington, Ky., has incorporated with a capital stock of \$100,000. Its incorporators are T. P. Foreman of Lexington, C. S. Lign, A. P. Stevens and B. F. Price, Johnstown, Pa., and J. J. Daugherty, Connelville, Pa.

Georgia.

A handsome and well-illustrated booklet, descriptive of the agricultural resources and products of Georgia, has just been issued by the land and industrial department of the Southern Railway and the Georgia Southern & Florida Railway, for distribution in the North and West in the work which these railroad companies are doing in the effort to attract desirable settlers to the South through the exploitation of its advantages and opportunities. The volume is the third in a series on the different States traversed by the Southern Railway and affiliated lines. It is not for circulation in the South, but will be given a wide distribution in sections where it is believed the greatest good can be done.

Full information is given concerning the character of soils to be found in Georgia, its delightful climate and abundant rainfall, while attention is especially drawn to the healthfulness of the State. The agricultural advantages of the different sections of the State are set out, showing the great yields of corn and other grains, grasses and forage, cane, potatoes and truck, as well as cotton. Especial stress is laid on the growing attention to the livestock industry, which has been greatly stimulated by the recent establishment of a packing-house in Atlanta and plans for such a plant at Macon. Georgia's supremacy in the growing of peaches is attractively shown, as are the opportunities for as great profits in the growing of apples and small fruits. The forest and mineral resources of the State are given a place, and attention is called to the splendid educational advantages and the excellent transportation facilities of Georgia, with special reference to the great work being done in the building of good wagon roads.

In this work for the upbuilding of the South the Southern Railway desires and appreciates the co-operation of the people of the States which it serves, and any citizen of Georgia or any other Southern State who wishes this publication placed in the hands of a friend or acquaintance in any locality in the North or West may have this done by sending the name and address of such friend or acquaintance to M. V. Richards, land and industrial agent, Washington, D. C.

LUMBER

[A complete record of new mills and building operations in the South will be found in the Construction Department.]

SLACK COOPERAGE STOCK.

Preliminary Comparative Report of Production in 1909.

The census of slack cooperage stock production in the United States during the calendar year 1909 disclosed that 1506 establishments were engaged in the industry, as against 1151 in 1908 and 950 in 1907. The reported output of staves was 2,029,548,000 pieces, an increase over 1908 of 30.3 per cent., and over 1907 of 72.6 per cent. The production of heading was 13.2 per cent. greater than in 1908, and 32.2 per cent. greater than in 1907, while there was an increase for hoops of 11.7 per cent. over 1908 and a decrease of 23.4 per cent. from 1907.

The comparative summary follows:

Kind of wood.	1909.		1908.		1907.	
	Quantity (number).	Value.	Quantity (number).	Value.	Quantity (number).	Value.
Red gum.....	416,929,000	\$2,174,900	317,016,000	\$1,727,700	210,814,000	\$1,239,000
Pine.....	306,621,000	1,606,300	275,239,000	1,342,000	205,878,000	1,063,400
Beech.....	268,237,000	1,611,600	166,383,000	1,043,000	125,354,000	790,400
Elm.....	245,172,000	1,688,400	192,882,000	1,381,700	158,440,000	1,192,300
Maple.....	133,255,000	722,900	124,747,000	750,600	97,319,000	610,000
Chestnut.....	93,290,000	412,100	79,633,000	338,000	74,982,000	339,900
Birch.....	78,897,000	458,400	52,739,000	339,400	21,479,000	135,400
Basswood.....	72,537,000	397,500	6,300,000	35,500	18,640,000	130,500
Spruce.....	71,989,000	394,300	69,012,000	308,300	76,445,000	392,900
Ash.....	71,705,000	511,400	74,434,000	485,900	70,128,000	557,900
Oak.....	66,675,000	464,300	53,737,000	344,700	37,871,000	259,900
Cottonwood.....	58,721,000	348,600	51,062,000	330,000	46,923,000	317,600
Tamarack.....	28,822,000	143,200	(*)	(*)	(*)	(*)
Tupelo.....	22,500,000	107,300	(*)	(*)	(*)	(*)
Sycamore.....	17,831,000	93,800	23,454,000	131,300	2,579,000	16,700
Yellow poplar.....	15,410,000	69,900	(*)	(*)	(*)	(*)
Hemlock.....	10,376,000	55,300	12,717,000	60,600	16,535,000	88,600
All other.....	50,700,000	263,800	67,223,000	293,300	12,590,000	85,700
Total.....	2,029,548,000	\$11,523,100	1,557,644,000	\$8,913,000	1,175,977,000	\$7,219,600
Heading (in sets).						
Pine.....	38,750,000	\$1,458,800	39,347,000	\$1,318,400	27,208,000	\$1,107,900
Beech.....	19,269,000	734,600	15,294,000	725,000	17,711,000	707,700
Red gum.....	16,911,000	866,400	17,249,000	934,900	11,468,000	665,100
Basswood.....	13,841,000	773,400	10,186,000	611,500	9,585,000	571,900
Maple.....	13,669,000	567,000	13,323,000	595,000	11,085,000	548,600
Elm.....	6,499,000	256,300	4,978,000	229,600	9,165,000	432,600
Cottonwood.....	6,038,000	345,700	2,957,000	113,700	1,781,000	117,900
Ash.....	5,245,000	223,200	4,237,000	262,100	7,424,000	435,100
Birch.....	4,728,000	227,500	3,961,000	215,400	2,146,000	116,800
Tupelo.....	3,296,000	147,000	(*)	(*)	(*)	(*)
Yellow poplar.....	2,412,000	94,100	(*)	(*)	(*)	(*)
Oak.....	1,963,000	94,000	2,092,000	116,000	2,814,000	133,000
Spruce.....	1,853,000	79,400	2,245,000	107,600	2,555,000	105,400
Tamarack.....	1,290,000	44,600	(*)	(*)	(*)	(*)
Hemlock.....	1,206,000	48,500	1,277,000	55,700	574,000	27,100
All other.....	3,671,000	158,800	7,533,000	376,700	1,937,000	94,200
Total.....	140,234,000	\$6,139,990	123,849,000	\$5,661,600	106,074,000	\$5,062,900
Hoops.						
Elm.....	334,477,000	\$2,294,900	326,894,000	\$2,241,900	463,734,000	\$3,393,900
All other.....	41,216,000	284,100	9,590,000	83,900	20,836,000	123,900
Total.....	375,793,000	\$2,579,000	336,484,000	\$2,325,800	484,570,000	\$3,517,800

*Included in "All other."

This information appears in a preliminary comparative report covering 1909, 1908 and 1907, transmitted to Census Director Durand by Chief Statistician William S. Steuart, under whose supervision it was prepared by J. E. Wheelchel, expert special agent of the division of manufactures. In co-operation with the forest service of the Department of Agriculture, the Bureau of the Census annually collects and publishes statistics pertaining to the group of lumber and timber industries.

In point of value the output of slack cooperage stock during 1909 amounted to \$20,242,000, which was an increase over 1908 of 19.8 per cent. and over 1907 of 28.1 per cent. The average value per unit was slightly lower in staves, heading and hoops than in either of the two preceding years, being \$5.68 per 1000 staves in 1909, as against \$5.72 in 1908 and \$6.14 in 1907; \$43.78 per 1000 sets of heading in 1909 and \$45.71 and \$47.73 in 1908 and 1907, respectively, and \$6.86, \$6.91 and \$7.17 per 1000 hoops in 1909, 1908 and 1907, respectively.

The manufacture of slack barrel staves and heading is an industry of wide distribution, having been engaged in during the past year in 35 States, being similar in this respect to the industry of lumber manufacture, and using as material practically all of the lumber timbers of the country. The industry, nevertheless, is in a measure localized, the five States of Michigan, Ar-

kansas, Pennsylvania, Virginia and Missouri contributing 58.8 per cent. of the staves and 55.9 per cent. of the heading in 1909, 60.1 per cent. and 56.5 per cent., respectively, in 1908, and 50.8 per cent. and 52.5 per cent. in 1907.

The manufacture of hoops is confined to a far more limited territory than that of slack barrel staves and heading, 66.7 per cent. of the total quantity of hoops manufactured during 1909 having been reported from Ohio, Michigan and Indiana and 82.4 per cent. and 83 per cent., respectively, reported from these three States in 1908 and 1907.

Red-gum staves were manufactured in largest quantity in all three years, closely followed in 1907 by elm, while in 1909 and 1908 pine staves were reported in next largest quantity. Among the leading woods, however, the largest percentage of increase is shown for beech, the output of staves from which wood was 61.2 per cent. greater in 1909 than in 1908 and 114 per cent. greater than in 1907. The relative

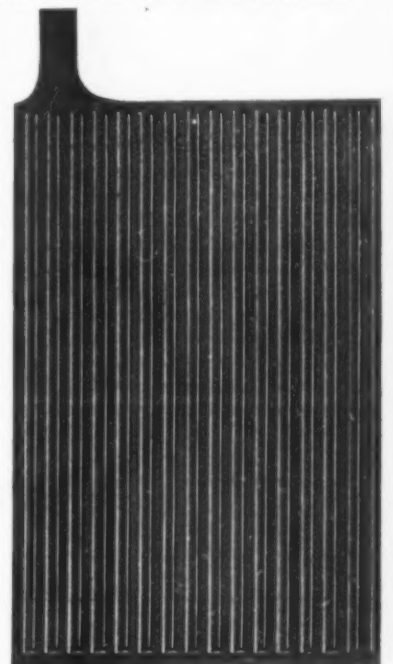
Staves.

MECHANICAL

"Ironclad-Exide" Battery.

The Electric Storage Battery Co. of Philadelphia has developed a new electric vehicle battery which will be placed on the market this year. This will be called the "Ironclad-Exide" battery, and it is the latest and highest development of the "Exide" battery. It is the result of years of study and experimentation, and long tests already made have proven its dependability, and it is the perfection of a battery first invented by a Frenchman. The Electric Storage Battery Co. secured the American rights on this patent about four years ago, and since then has been experimenting in an endeavor to perfect the battery. This has now been accomplished, and under severe tests has shown the most satisfactory results. The company says:

"The 'Ironclad-Exide' positive plate, illustrated herewith, is so designed as to effectually prevent the loss of active material. It consists of a metal conducting top and bottom bar connected by vertical conducting rods. Each rod is surrounded



"IRONCLAD-EXIDE" BATTERY PLATE.

by active material, which, in turn, is protected and held in place by a slotted hard-rubber tube. This tube carries a vertical rib on each side, which takes the place of wood separators, used with the standard 'Exide' type of positive plate, and makes the use of rubber separators unnecessary. A thin flat wood separator spaces the 'Ironclad-Exide' positive from its negative. The negative plate is a modified 'Exide' negative plate thickened and improved to enable it to withstand not so much the increased capacity as the truly unprecedented life of the new positive plate.

"The 'Ironclad-Exide' battery is claimed to have the following points of superior merit:

"Gives from two and one-half to three times longer life; active material does not shed from the plates, which eliminates the necessity for ever cleaning the cells; gives increased mileage and maintains this high capacity during the greater part of its life; can be installed in standard 'Exide' battery jars so that vehicle users having 'Exide' batteries can substitute the new battery when requiring renewals."

"New South" Brick Machinery.

The latest development of tile machinery by J. C. Steele & Sons of Statesville, N.

Contract for Ties and Timber.

The Western Maryland Railway, Continental Building, Baltimore, has awarded a contract to the J. M. Hastings Lumber Co. of Pittsburg for furnishing ties and construction timber to be used on the new extension which is now under construction from Cumberland, Md., to Connelville, Pa. Deliveries will soon begin, and it is expected that all the cross-ties will have been delivered by April 1.

Stave Manufacturers Elect Officers.

At the annual convention of the National Association of Tight Barrel Stave Manufacturers at Memphis last week the following officers were elected: Walter L. Wellford, Memphis, president; A. L. Hayes, Nashville, vice-president, and E. F. Defebaugh, secretary-treasurer.

C., is represented by two accompanying illustrations. The actual operation of these and other tile-making machines is shown at the company's demonstrating plant adjoining its works, where anyone interested can have the machines thoroughly explained. These machines are built in four sizes from 5000 capacity up, and furnished with tile dies of any size that can be handled on a horizontal machine.

Tile drainage is becoming of increased importance in many ways, and the manufacture of small machinery is being car-

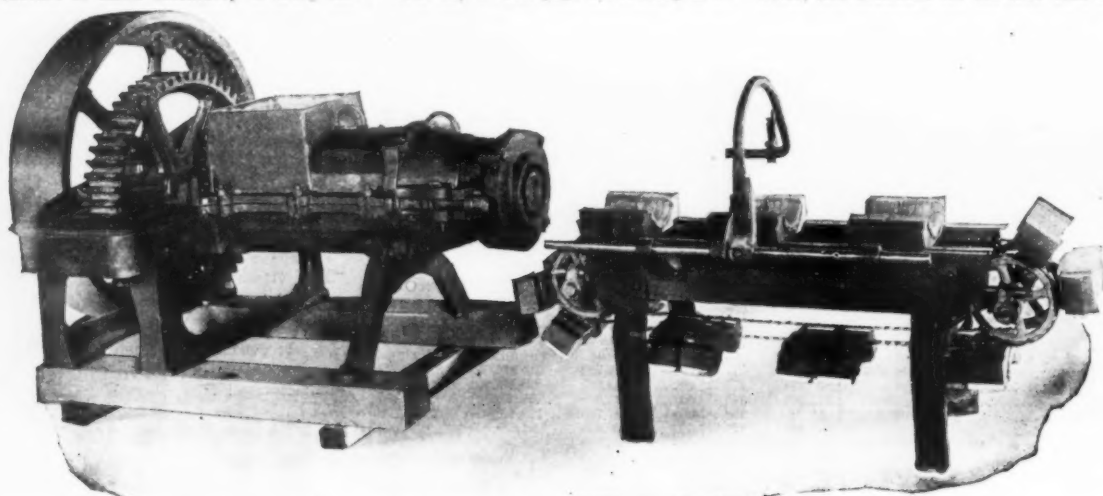
referred to is found in the *Cleveland News* under the heading of "The People's Electric Page," on which a part of the page is devoted to data pertaining to electricity and interesting illustrations of its practical application, such as the general reader and the practical electrician would notice. The advertising features, all of which pertain to electrical subjects, are arranged in an attractive way on the same page, thus holding the attention of anyone whose interest has been gained.

The day of full page advertising is ad-

and the Studebaker Bros. Company, located directly across the street from this newspaper office, came to the rescue in a novel manner.

The power required for the *News* linotypes was 220 volts. In 20 minutes' time the Studebaker Company unloaded from its electric trucks 105 "Exide" vehicle batteries. These were placed on a large truck which was stationed on the street just outside of the composing-room. Wires were run into the building from these batteries, and doubtless for the first time on

"The following are some of the principal features and dimensions: Double flange, top cone; table swings 180 degrees horizontally; ball-bearing thrust; screw adjustment to stop; steel rack and pinion; attached countershaft; taper to 5-16 inch Almond chuck or fitted with 1/4-inch Greenfield chuck; greatest distance from spindle to table, 8 1/2 inches; vertical movement of spindle, 2 1/2 inches; vertical movement of table, 7 inches; diameter of table, 8 inches; distance from center of spindle to frame, 5 1/4 inches; drilling capacity to



"NEW SOUTH" TILE MACHINE FOR FARMERS.

ried on in addition to the larger central manufacturing plants. The No. 1 machine of this company is a very small one, made especially for the farmer who wants to make his own tiles when he needs them. It is a very simple and substantial machine, easily operated by anyone without previous experience. It can also be easily changed for brick manufacture, and the bricks and tiles can be burned in the same common updraft kiln. The company will

vancing, and the firm that can and will devote an entire page to a description of its products, with full explanation of their merits, has a great advantage in educating the purchasing public in its particular line of products. The descriptive page advertisement of the Davis cypress tanks in last week's issue of the *MANUFACTURERS RECORD* is a noteworthy example. But where it is not practicable for a firm to devote a whole page to its adver-

record an electric automobile started to work in getting out a newspaper.

The 5 o'clock edition of the *Minneapolis Daily News* for January 6 owed its existence to this improvised power-house made up of "Exide" vehicle cells.

Myers Sensitive Drill Press.

There are many establishments and many different kinds of work in which drill presses are used. Purchasers of this

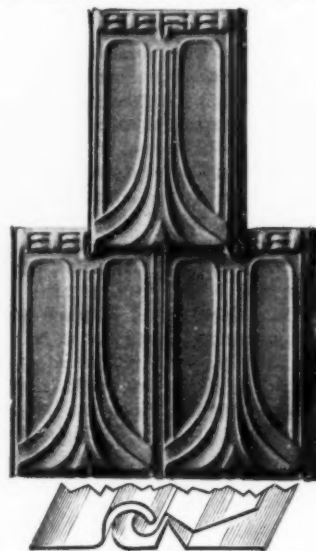


MYERS SENSITIVE DRILL PRESS.

5-16 inch; size of tight and loose pulleys, 4 1/2 x 1 1/2 inches; speed of driving pulley, 550 revolutions; weight of No. 1 drill press, 60 pounds."

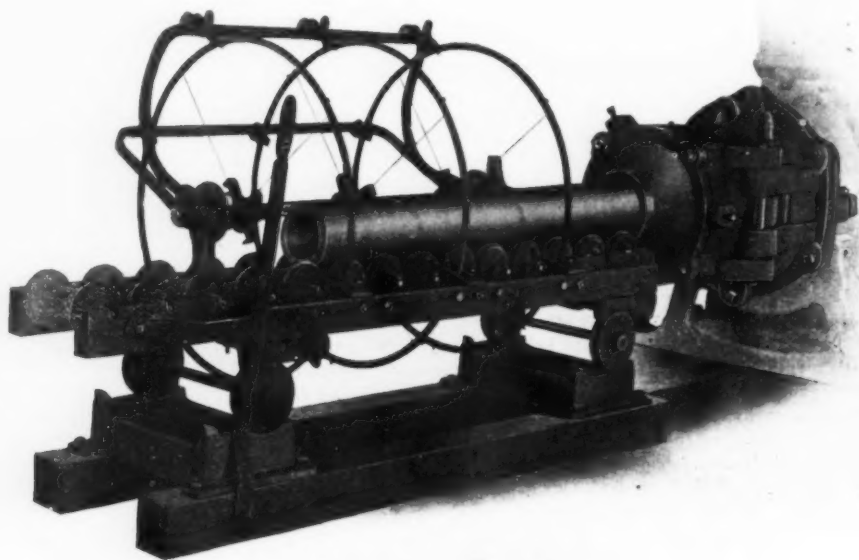
"Ajax" Metal Shingles.

The use of the metal shingle has been increasing steadily during recent years, and it is now approved by many architects, building contractors, owners of buildings and insurance authorities. That there is danger to wooden shingled houses from nearby fires will not be denied, and,



"AJAX" METAL SHINGLES.

to avoid this, other than wooden shingles are frequently chosen when buildings are to be erected or old ones are to be improved. The Edwards Manufacturing Co. of Cincinnati manufactures the "Ajax" metal shingle, now well and widely known and becoming better known every day. This company is now offering a new "Ajax" metal shingle, a view of which is presented herewith. Note the clear embossing and sharpness of pattern. Then there is the interlocking device, which provides for expansion and contraction and conceals all nails from the weather. These shingles properly applied are guaranteed to be wind, weather, storm,



"NEW SOUTH" TILE MACHINE AND HAND CUTTER.

give any information desired regarding the "New South" brick and tile machinery.

Effective Advertising.

The science of advertising, and the art of effectively presenting the subject advertised, is becoming of such importance in the newspaper world and to the general reading public that any noteworthy means for advance is quickly appreciated and eagerly adopted. An interesting example of effective advertising is shown in the system adopted over a year ago in Cleveland, O., and which has proven eminently successful in the newspapers of that city. An illustration of the form of advertising

tisement the next best thing has proven to be the combining of the different advertisements bearing somewhat on the same subject, to the same or adjacent pages, so that each is benefited by the strength of all in attracting attention to the subject referred to.

Storage Batteries in an Emergency.

An ingenious application of storage batteries for emergency work was made during the large fire at Minneapolis on January 6.

The destruction of the Minneapolis General Electric Co. power-house deprived the plant of the *Daily News* of electricity,

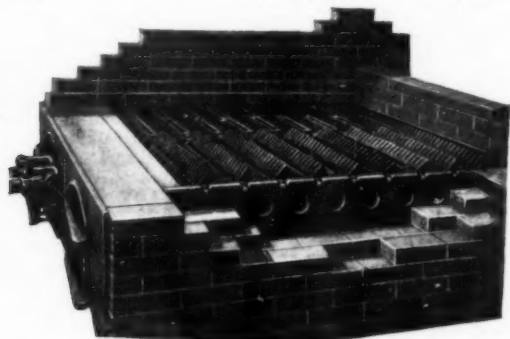
class of equipment are therefore interested in improved designs, and their attention is directed to the Myers sensitive drill, of which an illustration is presented herewith. This machine is manufactured by Charles S. Myers of Columbia, Pa., who describes it as follows:

"Special care has been exercised in the design and construction of this machine, in order to have it reliable and durable. All the parts are finished in jigs, so that they are interchangeable, and manufactured at as low a cost as is consistent with such a high-grade tool. No effort has been spared to make this the best small drill press that can be made.

fire and lightning proof. The patented interlocking device is so constructed that it is claimed the hardest rain or driving snow cannot penetrate. They are manufactured from best quality Worcester grade terne plate, furnished painted or galvanized (regalvanized after formation) in size 10x14 inches.

Patch Rocker and Shaking Grate.

Managers of steam-power plants are invited to investigate the merits of the Patch rocker and shaking grate illustrated herewith. This grate is manufactured by the S. B. Patch & Sons Company of Streator, Ill., which presents the following statement:



PATCH ROCKER AND SHAKING GRATE.

"The subject of supplying proper grates for steam boilers is of more importance than it is usually considered, as upon the grates in a large degree will depend whether the boiler is furnished steam economically and at its rated horse-power.

"It is surprising to those who understand the importance of the subject to observe the dilapidated condition in which some grates are operated. It is a source of useless waste; hence of expense to the owners.

"Engineers installing steam plants often fail to recommend improved grates, and owners fail to specify them through a mistaken idea that they are too expensive and do not work well, when they give perfect satisfaction in other plants, and there seems to be no good reason why they would not in their plants. The low price and simplicity of operation of the Patch rocker and shaking grate overcomes both the matter of price and operation.

"It is only fair to say that all kinds of stationary grates are unfit for use in the modern steam plant using coal for fuel, as it is difficult to thoroughly clean a fire with either one of the different kinds in use, and in some cases it is impossible, while a partial performance of the operation is secured only by hard and hot work, accompanied by loss of heat and reduction of steam pressure, with consequent loss of power, time, etc.

"Let us review the process and note the result where stationary grates are used with either pea or soft coal. The time having arrived for cleaning such a fire, the fireman proceeds to shove all good coal to the rear of the furnace, hauls the ashes and clinkers to the dead plate and shovels them into the ash pit. This leaves a large mass against the bridge wall, consisting of a thick layer of refuse at the bottom, covered by live coals. How are the two parts to be separated? The fireman cannot haul the refuse forward and leave the good coal for obvious reasons. If he hauls the latter forward and attempts to pull the refuse over it, the result is a hopeless mixture of the good and the bad, giving far from satisfactory results. The only way to secure a thoroughly clean fire with such a grate is to remove all material from it and start a new fire.

"If there was no known way of overcoming this difficulty, it would be in order to recommend that inventors turn

their attention to it, but this is not the case, for it is a well-known and conceded fact that the Patch rocker and shaking grate under a boiler renders this disagreeable and very unprofitable job unnecessary. It has been shown by rigid tests that they save boiler repairs, for the reason that the fire doors are not kept open to clean the fires, letting cold air in on the crown sheet, cooling it suddenly and at the same time letting the steam go down and taking valuable time to get up pressure again.

"The Patch grate is a practical, simple, durable and efficient low-priced grate, made with ample air space for burning slack, pea, nut or lump soft or hard coals.

It is made in any size and can be set in any furnace without alteration to the boiler setting. It can be installed by any mechanic in two to four hours, and if you are using the old-style, straight-bar stationary grate we can save you from 15 to 30 per cent. on your fuel bills.

"The Patch grate will pay for itself many times over in reducing the time required for cleaning, for there will be practically no cleaning to do. The operation of shaking the grates (without opening the fire doors), breaking up all of the clinker and letting it fall through into the ash pit, gives no chance for the formation of a 'pancake' clinker covering the entire



IMPROVED ELECTRIC FREIGHT LOCOMOTIVE.

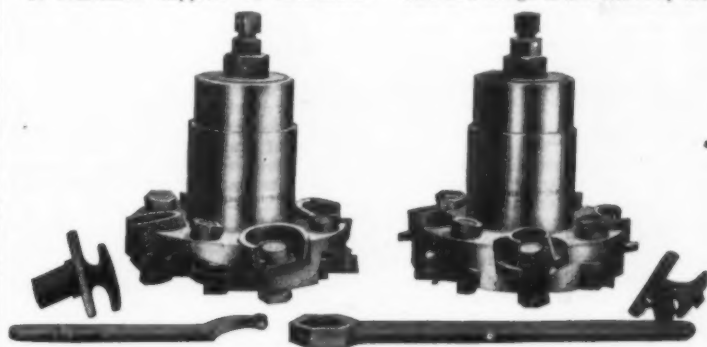
grate surface, and thus closing the air space and stopping off all draft, with consequent bad results."

Improved Electric Locomotive.

The electric freight locomotive illustrated herewith was recently built for the Galt, Preston & Hespeler Street Railway Co. of Ontario, Canada. This company operates a standard-gauge interurban line 21 miles long, connecting seven towns and traversing a farming country in which it does a thriving business in both local and through passenger and freight service. The mechanical parts of the locomotive were built and assembled at the Baldwin Locomotive Works of Philadelphia and then shipped to the Westinghouse Electric

& Manufacturing Co. of Pittsburgh, by whom the electrical equipment was applied. The locomotive is designed for the 4-foot 8½-inch standard-gauge track, and is provided with double swivel trucks. It has a wheel base of 29 feet, and the overall length is 36 feet; weight, 100,000 pounds; maximum traction effort, 25,000 pounds. It carries a quadruple equipment consisting of four No. 308-B2 interpole direct-current railway motors having a nominal rating of 100 horse-power each, or a total of 400 horse-power at 600 volts. The motors are fitted with special windings, adapting them particularly for slow-speed locomotive service.

It sometimes happens on interurban



THE "SHIMER-LIMITED" CUTTER HEADS.

and stub-end lines that the voltage at points far distant from trolley feeders is as low as 200 volts when motors are in operation. For this reason air-operated switch controls were installed on this locomotive, which insure reliability under all conditions of voltage. The entire frame structure of the locomotive is most substantial, and mechanical parts made to the M. C. B. standard. The cab is of wood, roomy and convenient for the operator, with four windows on each side and two in each end, which allows an unobstructed view in all directions. Suitable hoods at each end of the cab cover the resistance and other electrical equipment. A

traffic with the aid of a suitable electric locomotive.

The "Shimer Limited" Cutter Heads.

The user of every high-speed matcher is interested in the production of flooring at the lowest price consistent with good work. He feels the necessity of procuring tools and appliances that will not only do good work, but will add convenience for the workmen, with genuine labor-saving advantages. It is with a view to being of service to the woodworking trade engaged in manufacturing flooring and other matched work that the "Shimer Limited" cutter head has been placed on the market.

This new design is illustrated by the ac-

companying view, and in construction closely resembles the regular "Up to Date" and "Best of All" designs. But it differs from them in the method of attaching to the spindle; in the construction of the bit seats and of the bit designed for faster cutting; in the greater strength of the holding bolts, and especially in the self-centering device which clings to the spindle when drawn up, securing it firmly thereto. The spindle-gripping device is positive and effective in its purpose of holding fast to the spindle, as also in centering the head for a more uniform action of the cutters. This is accomplished by having the central bore of the head tapered and having a "rotatable" cap and nut fitted in the upper portion. Into this bore a taper collet contracts and binds itself firmly to the spindle. The device is simple and effective, and one not likely to go out of order.

These heads are made either solid or with the expansion feature, as may be preferred. All cutters are preferably made of high quality tool steel, and they hold an edge for five to ten hours' run with hard lumber. These cutter heads are manufactured by Samuel J. Shimer & Sons of Milton, Pa.

The Engineering Annual, 1910, of the University of Tennessee, published by the Engineering Society of the University, contains articles by J. M. Dempster and R. E. Stolzhus on burning bituminous coal without smoke, by C. L. Brown on a test of power plant at the Brookside Mills, and by A. R. Murphy on the equipment of the Knoxville water-works.

The Chamber of Commerce of Bluefield, W. Va., Mr. J. B. Pearson, secretary and treasurer, is circulating, in the interest of the development of its section of West Virginia, an attractively illustrated pamphlet and a map of the tributary territory.

The Wachovia Bank & Trust Co. of Winston-Salem, N. C., has offered four prizes to farmers of its section with a view to stimulating tobacco culture.

The Board of Trade of Frederick City, Md., is planning to raise a fund of \$100,000 for the encouragement of new industries.

It is reported that farmers of Mississippi will plant between 125,000 and 150,000 acres in peanuts this year.

Construction Department

TO OUR READERS!

In order to follow up properly the Construction Department items, please bear in mind the following statements:

EXPLANATORY

The MANUFACTURERS RECORD seeks to verify the items reported in its Construction Department by full investigation. It is often impossible to do this before the item must be printed or else lose its value as news, and when this is necessary the statements are made as rumored or reported, and not as positive information. If our readers will note these points they will see the necessity of the discrimination. We are always glad to have our attention called to errors that may occur.

HOW TO ADDRESS

The name of one or more incorporators of a newly incorporated enterprise should always be shown on letter addressed to the official headquarters or to the town of the parties sought, as may be shown in the item. Sometimes a communication merely addressed in the corporate or official name of a newly established company or enterprise cannot be delivered by the postmaster. By following these general directions the postoffice will be enabled to deliver your mail promptly, although it is inevitable that some failure by the postal authorities to deliver mail to new concerns will occur.

WRITE PERSONAL LETTERS

In communicating with individuals and firms reported in these columns a letter written specifically about the matter reported will receive better and quicker attention than a circular.

"In correspondence relating to information published in this department, it will be of advantage to all concerned if the Manufacturers Record is mentioned."

The Daily Bulletin of the Manufacturers Record is published every business day in order to give the earliest possible news about new industrial, commercial, building, railroad and financial enterprises organized in the South and Southwest. It is invaluable to manufacturers, contractors, engineers and all others who want to get in touch at the earliest moment with new undertakings, or the enlargement of established enterprises. The subscription price is \$25 per year. On all advertising contracts in the Manufacturers Record for three months or longer a subscription for the contract period to the Daily Bulletin is included.

BRIDGES, CULVERTS, VIADUCTS

Ala., West Columbus (not a postoffice).—West Columbus Land Co., Z. Hagerdon, president, West Point, Ga., will construct steel bridge costing \$60,000 to connect West Columbus with Columbus; T. W. Bates, secretary, Columbus, Ga. (See "Land Developments.")

La., Houma.—Terrebonne parish, J. C. Dupont, president Police Jury, will receive bids, with plans, not later than February 7 for construction of bridge across Bayou Terrebonne; span opening, 50 feet; total length, 132 feet, and 14 feet wide; creosoted piling, 12x12; height from water, 10 feet; contractors must get survey and permit from Secretary of War, Washington, D. C. (Previously noted, and see "Machinery Wanted.")

La., New Orleans.—City will construct bridge across drainage canal near Lake Pontchartrain; W. J. Hardee, City Engineer.

La., New Orleans.—City Commissioner Smith estimates cost of repairing Hagan Ave. bridge (collapsed) at \$4800; W. J. Hardee, City Engineer.

Miss., Meridian.—Lauderdale county will construct wooden bridge across Opossum Creek on Enterprise and Chunky road; bids received until February 6; W. R. Pistole, Clerk. (See "Machinery Wanted.")

Mo., Independence.—Jackson County Court instructed Roland T. Proctor, County Highway Engineer, to prepare plans and estimate of cost of constructing viaduct over Chicago & Alton Railroad tracks on 15th-street Rd. to Independence; structure will probably be of stone or concrete.

Mo., Kansas City.—City will construct reinforced-concrete arch bridge over Blue River at 15th St., requiring 3600 cubic yards of concrete, 300,000 pounds of steel and 1260 square yards creosoted-block pavement; also reinforced-concrete arch bridge over Brush Creek at Cleveland Ave., requiring 900 cubic yards of concrete, 80,000 pounds of metal and 350 square yards of creosoted-block pavement; Board of Public Works will receive bids until January 30; Waddell & Harrington, Leslie-Orear Bldg., Kansas City, are engineers. (See "Machinery Wanted.")

N. C., Salisbury.—C. M. Miller, Salisbury, is chief engineer of company to construct bridge in connection with construction of 52 miles of railroad.

Tex., Dallas.—Dallas County Commissioners' Court authorized issuance of \$23,000 of bonds for repairing following bridges: California Crossing, Commerce Street, Eagle Ford, Grand Prairie, Sowers, Record Crossing, Grauwiler Crossing, Keenan Crossing, two at Carrollton, one at Trinity Mills and two on Denton Creek.

Tex., Houston.—Houston Ice & Brewing Co. will construct 40-foot concrete span across bayou for distance of 175 feet, connecting its property on both sides of bayou; estimated cost, \$60,000.

Tex., Houston.—City voted issuance of \$500,000 of bonds for construction of viaduct across bayou at foot of Main St.; H. B. Rice, Mayor. (Recently mentioned.)

Tex., Texarkana.—Kansas City Southern Railway, A. F. Rust, resident engineer, Kansas City, Mo.; St. Louis Southwestern Railway, C. D. Purdon, chief engineer, Tyler, Tex., and Texas & Pacific Railway, B. S. Wathen, chief engineer, Dallas, Tex., will construct steel and concrete viaduct; 20-foot roadway for carriages, 6-foot sidewalk on one side and provision for 6-foot sidewalk on other side to be constructed when necessary; cost about \$100,000.

Va., Danville.—City Council will consider recommendation of finance committee to appropriate \$15,000 for construction of bridge at Union St.

Va., Gate City.—Scott county will construct steel bridge 192 feet 6 inches long over North Fork of Holston River; bids will be received until January 30; P. St. J. Wilson, State Highway Commissioner, Richmond, Va. (See "Machinery Wanted.")

Va., Lawrenceville.—Brunswick county will construct steel bridge 285 feet 3 inches long over Meherrin River; bids received until January 23; P. St. J. Wilson, State Highway Commissioner (Richmond, Va. (See "Machinery Wanted.")

Va., Richmond.—Richmond & Henrico Railway is having plans prepared by F. W. Scarborough of Richmond for steel viaduct 1259 feet long connecting National Cemetery Rd. and Fulton; cost estimated at \$150,000.

CANNING AND PACKING PLANTS

La., New Orleans.—G. S. Archer, representative, Detroit, Mich., plans establishment of cannery; cost \$75,000 to \$100,000.

Md., Baltimore.—Hannah E. Kriel, 3042 St. Paul St., awarded contract to Henry Pierson & Sons, 1000 Olive St., Baltimore, for erection of addition to pork-packing plant at 7-9 Henrietta St.; 43x38 feet; slag roof; fireproof; cost \$3000.

Tex., Goliad.—Progressive League is interested in establishment of cannery by J. W. Quinn.

CLAYWORKING PLANTS

Ala., Ragland.—Terra-cotta.—Atlantic & Gulf Portland Cement Co. will, it is reported, expend \$250,000 to build plant for manufacturing terra-cotta for piping and ornamental purposes.

Tenn., Nashville.—Bricks.—O. L. Jones of Chicago, Ill., and associates propose establishment of plant to manufacture bricks.

Tex., Garrison.—Bricks.—Garrison Pressed Brick Co. organized; will establish plant to manufacture finish bricks; construction begun.

Tex., Memphis.—Bricks.—Memphis Pressed Brick Co. incorporated with \$50,000 capital stock by J. S. Cobb, J. W. Massey and J. W. Greenwood; will establish plant to manufacture bricks; install boiler and engine; capacity, 20,000 bricks daily.

Tex., Plainview.—Tile.—C. R. Ball is interested in plan to establish plant for manufacturing subirrigation tile.

COAL MINES AND COKE OVENS

Ark., Hartford.—McKinley Coal Co., recently reported incorporated with \$50,000 capital stock, will develop 200 acres of coal land; daily output, 250 tons of coal; no further machinery needed; William McKinley, president; W. G. McKinley, vice-president; Carey Holbrook, secretary-treasurer.

Fla., Jacksonville.—Weller Coal Co. incorporated with \$25,000 capital stock; G. H. Weller, president; C. Buckman, vice-president; A. T. Hill, secretary-treasurer.

Ky., Ashland.—Roberts Coal Co. incorporated with \$100,000 capital stock by John F. Hager, B. E. Whitman, L. S. Wilson and others.

Ky., Gray.—Jellico Consolidated Coal Co. will develop 1400 acres of coal land; daily output, 100 tons of coal; Martin Marugg, president; W. J. Petty, vice-president; C. K. Goodson, secretary-treasurer. (Recently reported incorporated with \$10,000 capital stock under Tracy City, Tenn.)

Ky., Gray.—Jellico Consolidated Coal Co., recently reported incorporated with \$10,000 capital stock under Tracy City, Tenn., has acquired properties of Lynn Camp Coal Co. and will operate; Moron Marugg is president and C. K. Goodson secretary.

Ky., Paducah.—Eureka Coal Co. incorporated with \$20,000 capital stock by C. M. Riker and C. S. Bookwalter, both of Paducah, and R. R. Bookwalter of Danville, Ill.

Ky., Pikeville.—F. G. Fee purchased, it is reported, 6000 acres of coal and mineral property in Pike county for development.

Ky., Lexington.—Price Coal & Lumber Co. incorporated with \$100,000 capital stock by T. P. Foreman of Lexington, C. S. Lign, A. P. Stevens and B. F. Price of Johnstown, Pa., and J. J. Daugherty of Connellsville, Pa.

Ky., Sturgis.—West Kentucky Coal Co. plans increasing annual output from 500,000 to 2,000,000 tons coal, reaching maximum within two years, controlled by North American Company, 30 Broad St., New York.

Ky., Whitesburg.—Howard Scrifner and associates of New York purchased several thousand acres of coal and timber land on Troublesome Creek and Carr's Fork, in Knott county; propose developing at first that part of property contiguous to Lexington & Eastern Railroad.

N. C., Walnut Cove.—J. W. Payne, Donnoha, N. C., contemplates organizing company to develop coal mines; has leased 600 acres of land and will install machinery.

Va., Richmond.—Old Dominion Development Co., Mutual Bldg., will expend \$100,000 to erect coal-handling plant recently noted; daily capacity, 1000 tons of coal; new mine to be opened will be electrically equipped; daily output, 1500 tons of coal; present daily capacity, 800 tons of coal; cost of new mine and machinery, \$90,000; company operates Carbon Hill coal mines, 15 miles from Richmond; New York offices, 71 Broadway.

W. Va., Affinity.—Pemberton Coal & Coke Co. will, it is reported, install 150-kilowatt engine-driven generator and motor generator set, contract for which is said to have been awarded.

W. Va., Charleston.—McGregor Coal Co., John Laing, president, recently reported incorporated with \$300,000 capital stock, will in 60 days begin development of property in Logan county; daily output, 2500 tons of coal; cost of plant, \$300,000; later company will begin operations in Raleigh county.

W. Va., Marytown.—Big Sandy Coal & Coke Co. has reorganized as Solway Collieries Co.; J. C. Rawn of Marytown will be general manager; general offices, Syracuse, N. Y.

W. Va., Roderfield.—Davy-Pocahontas Coal Co. will construct tipples and develop 3500 acres of coal land; six veins of coal; two expected to furnish output of 1200 to 1400 tons daily within course of year; J. W. Edwards is general manager.

CONCRETE AND CEMENT PLANTS

Ala., Red Bay.—Red Bay Concrete Manufacturing Co. organized with \$5000 capital stock; Ed Tiffin, president; E. P. Auger, manager; E. A. Smith, secretary-treasurer; will establish plant to manufacture concrete products, including drain tiles, sewer pipe, culverts, etc.; also establish shop to manufacture machinery for plant.

COTTON COMPRESSES AND GINS

Tenn., Humboldt.—J. F. and J. G. Warmath will establish cotton gin.

Tex., Somerville.—Valley Gin Co. incorporated with \$10,000 capital stock by R. A. Brantley, Jr., J. D. Giddings and E. P. Reynolds.

Tex., Travis.—Travis Gin Co. incorporated with \$9000 capital stock by O. E. Davidson, J. I. Rause and J. M. Kelly.

COTTONSEED-OIL MILLS

Tex., Dallas.—Terrell Cotton Oil Co. increased capital stock from \$100,000 to \$240,000.

Va., Portsmouth.—Portsmouth Cotton Oil Refining Corporation awarded contract to Myers-Turpin Construction Co., Norfolk, Va., for erection of refinery; fireproof; cement, brick and structural steel; cost of machinery and building, \$70,000; Herman Aspergren, engineer in charge. (Recently noted.)

DRAINAGE AND IRRIGATION

Ark., Helena.—Beaver Bayou Drainage District authorized \$100,000 bond issue for drainage. Address Drainage Commissioners.

La., Lake Arthur.—Commissioners of Thornwell Drainage District No. 1, Elmer E. Baker, secretary, awarded contract to A. C. Wilkins of the Wilkins Company, Jennings, La., to construct drainage canal in Calcasieu parish; canal will be 20 feet wide at bottom and have average depth of 5 feet; will drain about 11,000 acres. (Recently mentioned.)

Miss., Tupelo.—Swamp Dredging Construction Co. incorporated with \$10,000 capital stock by D. W. Robins, B. H. Shubbs and J. Q. Robins.

N. C., Asheville.—Southern Land Reclamation Co. incorporated with \$150,000 capital stock by D. N. Graves of Boston, Mass.; W. T. Mason, J. P. Kerr and Charles A. Webb of Asheville, N. C.; purchased for \$100,000 State's interest in Mattamuskeet land reclamation district of Hyde county; district comprises 100,000 acres land; will reclaim by drainage; construct canals and pumping plant with daily capacity of 113,000,000 gallons; cost estimated at \$400,000. Mr. Graves, who is company's president and general manager, telegraphs Manufacturers Record that 50,000 acres is in lake and 50,000 acres surrounding; lake to be pumped out; lake bed and surrounding land to be ditched to convey water to central pumping plant (costing \$150,000), comprising two 24-inch, two 48-inch and six 60-inch centrifugal pumps; capacity of pumps, 2000 cubic feet per second.

Tex., Brenham.—Washington County Court authorized creation of Drainage District No. 1 and issuance of \$57,000 of bonds for construction of levee along Brazos River for protection of about 10,000 acres from overflow of Brazos River.

Tex., Hereford.—Hereford Valley Land & Irrigation Co. incorporated by L. Gough, T. E. Shirley, A. W. Gregg, S. B. Edwards and others; will install pumping plant of 1000 gallons capacity for irrigating model irrigation farm.

Tex., San Juan.—San Juan Land & Improvement Co. awarded contract to Louisiana-Rio Grande Irrigation Co. to irrigate land for farming purposes; no equipment or machinery needed; C. E. Hammond, president; John Gregg, vice-president; John G. Fernandez, secretary-treasurer; capital stock, \$25,000. (Recently reported incorporated under "Land Developments.")

ELECTRIC LIGHT AND POWER

Ala., Florence.—Muscle Shoals Hydro-Electric Power Co. held third annual meeting and re-elected Frank Washburn, president; J. W. Worthington, vice-president, and W. H. Lindsey, secretary; is continuing endeavors to complete arrangements for plant; plan is to build three dams and create 30 miles of slack-water navigation; superseding present narrow and tortuous canal of nine locks; three locks, each with lift of 25 feet, will provide navigation over shoals and make power available; engineers estimate it will cost \$7,400,000 to widen and deepen present canal; three dams are estimated to cost \$12,000,000, and Congress is asked to appropriate \$3,000,000; power company to spend \$3,000,000, \$1,000,000 each upon the three dams, and then an additional \$10,000,000 for construction and maintenance of power plants; offices at Montgomery, Ala. (Previously mentioned.)

Fla., St. Petersburg.—City contemplates voting on construction of electric-light system; W. F. Divine, City Clerk.

Ga., Swainsboro.—City contemplates, it is reported, voting on bond issue for electric-lighting system; probably purchase plant; Jesse Thompson, Mayor.

Ky., Louisville.—Kentucky Electric Co. will reorganize and incorporate with capital stock increased from \$600,000 to \$3,000,000; reports state company will build additional plant and use present plant as auxiliary; install steam turbines connected to high-voltage generators; arrange for operation condensing or non-condensing, with view of ultimately installing steam-heating system for underground supply. Chief Engineer L. S. Streng writes Manufacturers Record that the company has no definite plans as yet.

Miss., Tupelo.—City contemplates voting on issuance of bonds for changing electric-light plant from direct to alternating system. Address The Mayor.

Mo., Forsyth.—John A. Laird of St. Louis, Mo., plans construction of waterproof-electric plant three miles from Forsyth; develop 2500 horse-power for transmission by electricity to Forsyth and Springfield, Mo.; cost from \$300,000 to \$400,000; Mr. Laird now asking approval of War Department to build dam across White River.

Mo., Glasgow.—City has decision legalizing \$30,000 bond issue for construction of electric-light plant, sewer system and water-works. Address The Mayor.

Mo., Springfield.—H. M. Smith, C. H. Cole and F. M. McDavid of Springfield and A. J. Zwart of St. Louis, Mo., plan construction of water-power-electric plant on White River; cost is reported estimated at \$1,000,000.

Mo., Springfield.—W. H. Standish and associates plan construction of water-power-electric plant; dam to be across James River.

N. C., Waynesville.—Southern Assembly, James Atkin, president, will construct dam to form 200-acre lake and develop power for transmission by electricity; portion of dam of concrete, about 40 feet high, and remainder of earth. (See "Land Developments.")

N. C., Wallace.—Duplin Light & Power Co. incorporated with \$10,000 capital stock by J. C. Causey, Jr., John P. Boney, F. Q. Hall, A. L. McGowen and others.

Tenn., Manchester.—City is considering establishment of electric-light plant and water-works system; W. P. Hickerson, president First National Bank, may be addressed.

Tenn., Murfreesboro.—John Davis and Thos. Elam contemplate, it is reported, installing electric-light plant.

Tennessee.—Aluminum Company of America, Park Building, Pittsburgh, Pa., contemplates construction of water-power-electric plant on Little Tennessee River; now buying lands and water rights; begun preliminary surveys; no details determined; not ready to correspond on the subject.

Tenn., Bristol.—L. S. Randolph of Blacksburg, Va., has been retained as engineer to report on proposed water-power-electric plant in East Tennessee near Bristol; other details not ready for publication.

Tenn., Memphis.—Shelby county contemplates installing plant to furnish electric lighting for courthouse; cost about \$10,000; George B. Coleman, chairman of committee.

Tenn., Mercer.—Citizens' Electric-light Plant, recently reported incorporated with \$1500 capital stock, has plant; T. E. Mercer, president; J. M. Justice, treasurer.

Tex., Austin.—Austin Street Railway Co., W. J. Jones, general manager, will erect power plant.

Tex., Celina.—Celina Electric Light & Power Co. incorporated with \$5000 capital stock by W. I. Bryan, Edward Langford and V. L. Patrick.

Tex., Canyon.—City Council granted 25-year electric-light franchise to L. T. Lester, L. E. Cowling and associates.

Tex., Fort Worth.—City voted issuance of \$50,000 of bonds for extension and improvement of electric-light plant; J. D. Trammell, City Engineer. (Recently mentioned.)

Tex., Fort Worth.—Northern Texas Traction Co. will build substations in Fort Worth and Dallas, Tex., and will also provide funds for completion of power station at Handley, Tex.

Tex., Georgetown.—City has engaged F. H. Lancashire, Dallas, Tex., to extend electric-light and water-works systems; cost \$31,675; R. E. Ward, Mayor. (Recently mentioned.)

Va., Covington.—City contemplates voting on issuance of \$50,000 of bonds for construction of electric-light plant. Address The Mayor.

Va., Staunton.—Staunton Lighting Co. will

install 500-horse-power turbine engine and 500-kilowatt direct-connected generator; capacity, 10,000 16-candle-power incandescent lamps; power, when new equipment is installed, will be sufficient to carry 25,000 16-candle-power lamps.

Va., Warrenton.—M. J. O'Connell & Son, Washington, D. C., purchased, it is reported, Warrenton electric light plant through Piedmont Land Agency of Warrenton; cost, \$20,000.

FERTILIZER FACTORIES

Ala., Samson.—South Alabama Fertilizer Co. incorporated with \$10,000 capital stock by W. H. Holloway, M. F. Anderson, W. D. Alford and others.

S. C., Great Falls.—Southern Power Co., Charlotte, N. C., will install 4000-horse-power plant to cost \$125,000; will produce 3000 tons of fertilizer annually; manufacture nitric acid and treat limestone with nitric acid, giving nitrate of lime. (Recently reported contemplated.)

FLOUR, FEED AND MEAL MILLS

Ala., Attalla.—Western Grain Co. of Birmingham, Ala., leased Brown Milling Co.'s corn mill with capacity of three carloads daily; will install new machinery to increase capacity.

Tex., San Angelo.—Paul Garrett Milling Co. will rebuild burned flour mill; four stories; reinforced concrete; cost of building \$10,000; cost of machinery \$15,000; will establish grain elevator in connection to cost \$15,000. (Previously noted.)

FOUNDRY AND MACHINE PLANTS

Ala., Birmingham.—Cotton Gins.—Continental Gin Co. increased capital stock from \$2,000,000 to \$3,000,000 and made liberal appropriations for improvements at various plants.

Ala., Birmingham.—Grate Bars.—Thomas Grate Bar Co., Edward L. Thomas, president, purchased plant of T. F. Johnson at 42d St. and Tenth Ave., East Birmingham, for \$14,000; will remodel and equip for manufacture of patented elliptic grate bar.

Ga., Savannah.—Sash Weights, etc.—Star Sash Weight & Foundry Co. incorporated with W. Rogers Starr president; succeeds Seaboard Pipe Foundry Co., and will manufacture principally sash weights and grate bars for large furnaces; plant is being equipped with improved machinery. (Seaboard Pipe Foundry Co. recently reported to enlarge plant.)

Ky., Louisville.—Machines.—R. E. Harryman Machine Co. incorporated with \$10,000 capital stock by R. E. Harryman, F. A. Cazel and W. J. Goodwin.

Md., Baltimore.—Gas Stoves, etc.—Baltimore Gas Appliance & Manufacturing Co. organizing with \$300,000 capital stock; leased plant at Bayard and Wicomico Sts. and will remodel; 200,000 square feet of floor space; install machinery for annual output of 30,000 gas ranges, 15,000 gas heaters, etc.; president and general manager, H. W. Hunter; vice-president and treasurer, D. C. Ammidon; secretary, Norman James, all of Baltimore; general superintendent, Martin W. Longfellow of Estate Stove Co., Hamilton, O.; company financed through Hambleton & Co., 10 S. Calvert St., Baltimore; offices at plant.

Miss., Meridian.—Automatic Machines.—Mississippi Automatic Machine Co. incorporated with \$30,000 capital stock by W. H. Millsbaugh, E. B. Blair, A. J. Lyon, W. A. Gough and others.

N. C., Charlotte.—Dixie Foundry Co., recently reported incorporated with \$10,000 capital stock, has elected G. E. Babcock, president, and R. L. Duval, secretary-treasurer; operates plant at South Poplar St. and Southern Railway, and contemplates, it is reported, making improvements.

N. C., Concord.—Oil Engines.—Carolina Gas Oil Engine Co. incorporated with \$25,000 capital stock by George C. Heglar, K. R. Baughman and M. B. Stickley.

N. C., King.—Sawmills, etc.—V. T. Grabs Company was incorporated by V. T. Grabs, W. F. Grabs and J. S. Grabs, and not by parties recently named.

Tenn., Chattanooga.—Foundry, etc.—Ross-Meehan Company, Carter and Main Sts., will receive bids at once for erection of factory building to replace burned structure recently noted; 125x221 feet; one story; brick; asphalt roof; plans by Adams & Alsop, James Bldg., Chattanooga.

Tex., Fort Worth.—Gasoline Engines.—Noblette-Smelzer Engine Co. is name of company recently noted to be organized by Bert Noblette and J. M. Smelzer; will erect 80x100-foot building; mill construction; cost \$2000; cost of machinery, \$7000; daily capacity,

three gasoline engines; J. M. Smelzer, president; Bert Noblette, manager, 410 S. Jennings Ave.

Tex., Wichita Falls.—Engines and Boiler.—Corinth Engine and Boiler Works, Corinth, Miss., submitted proposition to Chamber of Commerce to establish engine and boiler works.

GAS AND OIL DEVELOPMENTS

Ala., Talladega.—Talladega Light and Water Commission will expend \$10,000 to extend gas and water mains.

Ky., Tipton County.—Great Southern Oil & Mining Co. of Louisville, Ky., organized with \$500,000 capital stock, will develop oil deposits on J. N. Harris' farm, in Fifth district of Tipton county; planning to drill three wells.

Tex., San Antonio.—Civola Creek Oil Co. incorporated with \$3000 capital stock by J. D. Crenshaw, J. N. Groesbeck and H. M. Aubrey.

Mo., Carthage.—Bates County Gas Co. incorporated with \$50,000 capital stock by T. W. Connelly, J. S. Connelly and J. C. Gibson.

Mo., St. Louis.—Midvalley Oil Co. incorporated with \$15,000 capital stock by Charles J. Krause, E. J. Krause, both of St. Louis; James Duncan of Alton, Ill., and others.

Tex., Henderson.—Milville Oil Co. incorporated with \$25,000 capital stock by John R. Arnold, E. B. Alford, D. R. Harris and others.

Tex., Trinity.—Trinity Valley Oil & Gas Co. incorporated with \$10,000 capital stock; John B. Peyton, president.

W. Va., Buckhannon.—Clifco Oil & Gas Co. incorporated with \$25,000 capital stock by W. L. Fisher, C. I. Farnsworth, Oscar B. Beer and others.

W. Va., Jarvisville.—Jarvisville Oil & Gas Co. incorporated with \$25,000 capital stock by Hiram J. Burns, R. Gibson Perry, Stephen E. Bennett and others.

W. Va., Summersville.—Summersville Oil & Gas Co. organized with \$25,000 capital stock; Wm. Post, president; E. G. Young, secretary-treasurer; will develop 10,000 acres of land in Nicholas county.

ICE AND COLD-STORAGE PLANTS

Ala., Evergreen.—Beaver-Jackson Lumber & Veneer Co. will construct 15-ton ice plant to cost \$15,000; construction begun; contract for machinery awarded.

Ark., Rogers.—Rogers Ice & Cold Storage Co. incorporated with \$50,000 capital stock.

Ga., Atlanta.—East Atlanta Ice Co. incorporated with \$50,000 capital stock by T. W. Jenkins and Wm. M. Morris.

Ga., Thomaston.—Company organized by F. M. Garner, A. J. Nelson and C. W. Reid will establish ice plant; daily capacity 12 tons; machinery purchased.

Ky., Shelbyville.—Glacier Ice Co. will rebuild plant recently burned; also install cold-storage plant and bottling works.

Ky., Shelbyville.—Grover Todd will, it is reported, establish refrigerating and ice plant.

W. Va., Cameron.—Belmont-Monroe Oil & Gas Co. incorporated with \$10,000 capital stock by W. J. Booher, J. L. Phillips and others.

IRON AND STEEL PLANTS

La., New Orleans.—Steel Slats.—Success Pressed Steel Slat Co. incorporated with \$750,000 capital stock by Henry W. Hille, Walter J. Turnbull, Jr., Leon Levedan, Geo. Maler and Pierre A. Lelong, Jr.

Md., Sparrows Point.—Steel Castings.—Standard Steel Casting Co. incorporated by Frederick A. Weymouth and John S. Crowther, Jr., of Sparrows Point and Herbert F. Balls of Govans, Md.; Mr. Weymouth advises Manufacturers Record his company is not now prepared to outline plans.

Tex., Jefferson.—Iron Furnace and Steel Plant.—Dallas Coal, Iron & Steel Co. incorporated with \$2,500,000 capital stock; purchased Jefferson Iron Co.'s blast furnace, 7000 acres iron land, etc.; will remodel furnace and add brick stoves; contemplates building two open-hearth units, billet mill and merchant mill for rolling cotton ties and bars; W. F. McClurg in charge of plant; president, R. D. Yoakum of National Bank of Commerce Bldg., St. Louis, Mo.; vice-president, J. W. Wright; secretary, R. P. Wafford; treasurer, F. J. Schoelkopf, each of Dallas, Tex.

W. Va., Beechwood.—Parkersburg Iron & Steel Co. will erect addition to plant, 100x250 feet, of iron construction; additional equipment to be installed.

LAND DEVELOPMENTS

Ala., Birmingham.—Mountain Oak Land Co. incorporated with Walter B. Fowkes president and treasurer, Richard V. Evans vice-president, Joseph T. Collins, Jr., secretary.

Ala., Fairhope.—D. H. Stewart of Pittsburg, Pa., purchased 200 acres of land; will subdivide bay fronts into lots 60x150 feet, with 60-foot streets in front; 50 feet of bluff reserved for park; will divide balance into two-and-a-half-acre blocks and plant in oranges; will also erect bungalow.

Ala., Gadsden.—Gadsden Land & Development Co. will issue \$40,000 of bonds to pay debt, acquire and develop suburban property.

Ala., Girard.—L. H. Humber and E. P. Owsley, both of Columbus, Ga., purchased 1200 or 1300 acres of land in Girard, extending down river in Russell county, Alabama, and will probably develop for residence section.

Ala., Montgomery.—Realty Syndicate, recently reported incorporated with \$50,000 capital stock, has elected J. S. Wilcox, president; F. Stollenwerck, vice-president and treasurer, and O. O. Nelson, secretary and manager.

Ala., West Columbus (not a postoffice).—West Columbus Land Co. organized with \$150,000 capital stock; Z. Hagerdon, president, West Point, Ga.; F. G. Power, vice-president; T. W. Bates, secretary-treasurer, both of Columbus, Ga.; purchased 536 acres of land in Alabama opposite Columbus, Ga., and will develop for residence section; construct \$60,000 steel bridge to connect with Columbus and expend \$25,000 for constructing automobile boulevard, streets, parks, etc.; development to be known as West Columbus. (Noted in October.)

Ark., Tex., Texarkana.—James T. Roseborough and O. S. Holliday purchased about 1100 acres of land for \$17,000; will cut timber and cultivate cotton, corn and alfalfa.

Fla., Tampa.—North Tampa Heights Land & Development Co. incorporated with \$10,000 capital stock; T. S. Booth, president, Stone Mountain, Ga.; T. M. Frazier, vice-president, Clarkson, Ga.; W. C. Teague, secretary; will develop tract of land near Sulphur Springs.

Ga., Berzella.—Levi W. Hill of Ellenton, S. C., purchased 417 acres of land (practically entire town) for \$11,000; will make improvements, enlarge lake, erect cottages and establish residence town.

Ga., Savannah.—Southern Forestry and Gardening Service incorporated with \$100,000 capital stock by C. J. Robinson and D. C. Talbott.

La., New Orleans.—Fidelity Land Co., Hibernia Bank Bldg., organized with \$100,000 capital stock; Wm. H. Heyl, president; Ernest J. Coulen, vice-president; E. L. Chapuis, secretary-treasurer.

Md., Anne Arundel County.—Magothy Villas incorporated; Dr. Guy L. Hunner, president, 2305 St. Paul St.; Geo. C. Morrison, vice-president, Equitable Bldg.; Lester L. Stevens, attorney, Gunther Bldg.; all of Baltimore, Md.; purchased 183 acres of land in Anne Arundel county on Magothy River and will develop for residence section; subdivide into building lots, erect cottages, construct curved roads and avenues, install drainage system, etc.

Md., Roland Park.—Roland Park Co., 498 Roland Ave., is negotiating to purchase Guilford Company's 236 acres of land for development as residential suburb in connection with continuation of Roland Park development; plans increasing capital stock to acquire Guilford and provide funds for development; will probably announce details soon.

Md., Mt. Washington.—Hill Top Park Co. (recently reported incorporated), Harry Webb, president, Maryland Telephone Bldg., Baltimore, Md., purchased 90 acres of land fronting 3000 feet on proposed boulevard and will develop for residence suburb to be known as Hill Top Park; will subdivide, construct winding streets and avenues; Langdon & Gittings, landscape architects, Boston, Mass.; plans to erect four bungalows to cost \$25,000 to \$30,000; cost of development and land, \$300,000.

N. C., Charlotte.—Interstate Improvement Co. incorporated with \$125,000 capital stock; will develop 75 acres of land for residence suburb, subdividing into 275 building lots, constructing streets, etc.

N. C., Charlotte.—Interstate Improvement Co. incorporated with \$125,000 capital stock by E. L. Profit, J. A. Smith and J. T. Smith.

N. C., Waynesville.—Southern Assembly organized with \$225,000 capital stock; James Atkin, president; S. C. Satterthwaite, secretary; B. J. Sloan, treasurer, all of Waynesville; John R. Pepper, vice-president, of Memphis, Tenn.; purchased 3000 acres of land in Haywood county near Waynesville and will develop religious educational settle-

ment; construct dam across Richland Creek to form 200-acre lake, horse-power of which will be developed to operate electric-light plant and railway; portion of dam will be concrete, about 40 feet high, with remaining portion of earthwork; five miles of cottage sites will front lake; plans call for erection of auditorium, large hotel and two smaller ones; contemplates ultimate expenditure of \$500,000. (Recently noted.)

S. C., Columbia.—Argus Investment Co. organized with \$50,000 capital stock by William Davis Melton, August Kohn and W. Gordon Belser.

Tenn., Chattanooga.—Southside Land Co. will increase capital stock from \$12,000 to \$24,000.

Tenn., Memphis.—E. O. Bailey Land Co. incorporated with \$75,000 capital stock by E. O. Bailey, M. T. Roush, E. J. Hobbs and others; Mr. Bailey recently noted to purchase 90 acres of land for development; will subdivide, construct gravel streets, etc.

Tex., Houston.—Gulf Coast Development Co. incorporated with \$150,000 capital stock by Frederick C. Hubbell of Houston, Julius R. Kersten of Calvert, Tex., and others.

W. Va., Morgantown.—Mapleton Orchard Co., 108 High St., recently reported incorporated with \$50,000 capital stock, will develop peach orchard; improvements include clearing of land, planting trees, building houses, stables and installing necessary equipment; cost, \$15,000 to \$20,000; E. W. McNeil, president; E. T. Shultz, secretary-treasurer.

LUMBER MANUFACTURING

Ark., Hamburg.—Missouri & Arkansas Lumber Co. will rebuild lumber plant recently reported burned.

Ark., Kearney.—Pearce Lumber Co. incorporated with \$60,000 capital stock; leased Bluff City Lumber Co.'s plant, and will cut 30,000,000 feet of yellow pine lumber from lands adjacent to it; T. Pearce is president; J. F. Rutherford, vice-president, and James H. Allen, secretary-treasurer, all of Pine Bluff, Ark.

Ga., Macon.—Redding-Matthews Lumber Co. incorporated with \$2000 capital stock and privilege of increasing to \$20,000 by W. C. Redding and J. M. Matthews.

Ga., Moultrie.—Ladson-Huber Lumber Co. incorporated with \$20,000 capital stock by J. E. Ladson, W. A. Covington and A. Huber.

Ky., Lexington.—Price Coal & Lumber Co. incorporated with \$100,000 capital stock by T. P. Foreman and others. (See "Coal Mines and Coke Ovens.")

Ky., Paducah.—Fooks Lumber Co. increased capital stock from \$20,000 to \$50,000.

Ky., Stearns.—Stearns Coal & Lumber Co. will improve electric-driven lumber mill.

Ky., Whitesburg.—Howard Scrifner and associates of New York purchased several thousand acres of timber and coal land for development. (See "Coal Mines and Coke Ovens.")

La., New Orleans.—Otis Manufacturing Co., H. A. Otis, president, has completed erection of sawmill recently noted; cost \$10,000; machinery purchased; daily capacity, 85,000 feet of mahogany lumber.

Md., Garrett County.—Jesse, Oscar and Calvin Broadwater, New Germany, Md., purchased 400 acres of timber land in Garrett county and will establish sawmill.

Miss., Charleston.—City Lumber Co. incorporated with \$10,000 capital stock by J. M. O'Neal, J. C. Wilson and others.

Miss., Meridian.—Harrison-Cochran Lumber Co. incorporated with \$25,000 capital stock by J. S. Harrison of Hattiesburg, Miss.; C. W. Cochran and J. L. Hart of Meridian.

Miss., Pelahatchie.—Lockwood Lumber Co. increased capital stock from \$100,000 to \$300,000.

Miss., Shelby.—M. A. Ford Company (not A. W. Ford Lumber Co., as recently incorrectly reported) incorporated with \$10,000 capital stock; J. C. Roberts, president; J. M. Latalais, vice-president; M. A. Ford, secretary-treasurer; it is a merchandise corporation.

Mo., St. Louis.—Charles D. Borrowman Lumber Co. incorporated with \$10,000 capital stock by Charles D. Borrowman, August Bierman and M. M. Primus.

N. C., Hayesville.—Big Creek Lumber Co. of New York has, it is reported, purchased from Roger Alexander Dewar, Atlanta, Ga., 10,000 acres of timber land in Clay county.

N. C., McDowell County.—Bennett & Gillman, Morganton, N. C., are developing, it is reported, about 300,000 acres of timber land in McDowell county, estimated to contain 6,000,000 feet of poplar, pulp, tannic acid wood and tanbark, etc.; flume seven miles long is being built down Curtis Creek.

N. C., Wilson.—Bryant Lumber Co. will rebuild burned plant; practically fireproof construction; electric lighting; cost \$18,000; construction under supervision of mill superintendent; daily capacity 40,000 feet of timber. (Recently noted.)

S. C., Barnwell.—Virginia-Carolina Lumber Co., R. T. Yates, president, Lynchburg, Va., increased capital stock from \$50,000 to \$100,000, and contemplates building band mill; plans not definitely determined.

S. C., Sumter.—W. W. Mills Lumber Co. incorporated with \$10,000 capital stock by W. W. Mills, C. L. West and V. M. Field.

Tenn., Dayton.—H. R. Thomas purchased timber rights on 5000 acres for \$14,000 and will erect several sawmills.

Tenn., Jackson.—Mississippi Valley Tie Co. incorporated with \$50,000 capital stock by G. H. Robertson, C. G. Bond, Thomas I. Taylor, W. A. Caldwell and others.

Tenn., Memphis.—Phillip A. Ryan Lumber Co. incorporated with \$50,000 capital stock by Phillip A. Ryan, James E. Ryan, J. D. L. Whitaker and others.

Tenn., Nashville.—B. & M. Lumber Co. incorporated with \$20,000 capital stock by John W. Boyd, Hamilton Love, C. E. McGlocklin, William W. Andrews and Wendell McFadden.

Va., Roanoke.—Roanoke Hardwood Flooring Co. incorporated with \$50,000 capital stock; H. C. Spangler, president; A. L. Wolfe, vice-president; A. L. Wolfe, Jr., secretary-treasurer.

W. Va., Fayetteville.—C. L. Munger Lumber Co., Charleston, W. Va., contemplates developing Foulke timber tract, containing about 12,000 acres, on Meadow River; proposes to install band-mill equipment.

W. Va., Petersburg.—Petersburg Lumber Co. incorporated with \$25,000 capital stock by Luther Stafford and C. N. Fennell of Keyser, W. Va.; C. C. Martin, E. E. Font and Charles Font of Laurel Dale, W. Va.

METAL-WORKING PLANTS

Md., Baltimore.—Tin Boxes.—American Tobacco Co., Charles and Barre Sts., is having preliminary plans made by Theodore Wells Pietsch, American Bldg., Baltimore, for power plant for tin-box factory (recently reported) on Boston St.; concrete and stone; slate roof; cost \$25,000. Painter & Posey, Professional Bldg., Baltimore, are the engineers.

Md., Baltimore.—Tin Cans.—Phelps Can Co. chartered with \$50,000 capital stock by Walter J. Phelps, foot of Lawrence St., and others.

Md., Baltimore.—Metal Boxes.—American Tobacco Co., Charles and Barre Sts., is having plans prepared by Theo. W. Pietsch, American Bldg., Baltimore, for proposed factory at Boston St. and water front; will lithograph and manufacture metal boxes; cost \$500,000.

N. C., Dallas.—Shingles.—Clemmer Metallic Shingle Co. incorporated with \$25,000 capital stock by H. M. Clemmer, G. W. Deltor and H. H. Robinson.

MINING

Fla., Tampa.—Phosphate Rock.—T. H. Synon of Norfolk, Va., and associates will, it is reported, develop phosphate-rock deposits on 10,000 acres of land near Tampa.

Ga., Frog Mountain.—Iron.—Anniston Iron Corporation, Anniston, Ala., leased for development 900 acres of iron land from Cedar-town Iron Co. of Birmingham, Ala.; lease includes two ore-washing plants, two steam shovels, locomotive, mine cars and other equipment, complete; capacity per month, 2500 tons of ore.

Md., Baltimore.—Gold.—Southern States Gold Mining & Milling Co. incorporated with \$100,000 capital stock by John H. Buxton, 340 Equitable Bldg.; Chas. E. Oberhelm and Wm. B. Buxton; to develop mineral lands in the Appalachian range.

Mo., Joplin.—Lead and Zinc.—Falls City Lead & Zinc Co. will establish concentrating mill on site of Black Cat mill; covered with galvanized sheets; daily capacity, 300 to 400 tons of ore; construction begun.

Mo., Joplin.—Lead and Zinc.—Open Cut Mining Co. incorporated with \$2000 capital stock by C. G. Tharp, A. R. Stewart, both of Joplin, and A. G. Young of Webb City.

Mo., Joplin.—Lead and Zinc.—Holy Moses Mining Co. incorporated with \$30,000 capital stock by L. C. Moses, Frederick Moses, E. E. Copley and others.

Okla., Collinsville.—Zinc.—Prime Western Smelting Co. of Iola, Kans., is reported to establish \$100,000 zinc smelter and town between Collinsville and Owasso, Okla.

Tenn., Del Rio.—Graphite.—John N. Adams is engineer in charge for corporation formed to develop graphite deposits; will erect plant designed to treat 20 tons of gangue daily; has not awarded contracts. (See "Machinery Wanted.")

Tex., Damon.—Vital Remedies Co. incorporated with \$125,000 capital stock by Charles A. Culter, Geo. L. Glass and Joe H. Eagle; will develop mineral deposits for medicinal purposes; plans erection of sanitarium at Houston, Tex.

Va., Chase City.—Gold.—Benjamin Goode plans development of gold deposits on 2200 acres of land in Mecklenburg county.

MISCELLANEOUS CONSTRUCTION

Fla., Key West.—Quay Wall.—Government awarded contract to Hennibque Construction Co. of New York at \$110,000 for construction of quay wall. (Recently mentioned.)

Md., Baltimore.—Dock.—Harbor Board approved plans of Oscar F. Lackey, Harbor Engineer, City Hall, for municipal dock to be built at intersection of Covington St. and Hughes Ave.; dock will have slip on either side. (See "Road and Street Work.")

Miss., Greenville.—Levee.—Mississippi Levee Commissioners agreed, upon recommendation of Chief Engineer W. J. Shackelford, to award contracts February 1 for construction of 600,000 cubic yards of levee work. (See "Machinery Wanted.")

S. C., Charleston.—Coal Piers, etc.—Cumberland Corporation, Mark W. Potter, president, 24 Broad St., New York, has practically decided on construction plans for coal piers; will make due announcement when prepared to begin work. (Previously noted proposed.)

Tex., Galveston.—Channel.—G. P. Howell, Major, Engineers, U. S. Engineer Office, Galveston, Tex., will receive bids until February 11 for dredging channel between Brazos River and Matagorda Bay. (Further facts recently mentioned. See "Machinery Wanted.")

Tex., Houston.—Dredging.—City voted issuance of \$1,250,000 of bonds to be transferred to Government for deepening Buffalo Bayou from turning-basin, three miles below Houston, to Galveston Bay; Government has appropriated same amount, making total of \$2,500,000 available; H. B. Rice, Mayor.

MISCELLANEOUS ENTERPRISES

Ala., Birmingham.—Plumbing.—F. A. Brand Plumbing Co. incorporated with \$2000 capital stock; F. A. Brand, president; J. P. Brand, general manager; J. F. Reilhart, secretary-treasurer.

Ala., Birmingham.—Fire Extinguishers.—Southern Fire Extinguisher Co. incorporated with \$2000 capital stock; Clyde Hunter, president and general manager; J. H. Hunter, secretary; Frank Parsons, treasurer.

Ala., Birmingham.—Taxicabs, etc.—Taxicab & Touring Car Co. incorporated with \$2000 capital stock; E. R. Minnette, president; C. C. Jones, vice-president; G. H. McLin, secretary-treasurer.

Ala., Birmingham.—Undertaking.—Lige Loy will remodel undertaking establishment, including reconstructing several walls, refrescoing, etc.; cost \$5000.

Ala., Bessemer.—Publishing.—Bessemer Standard will be incorporated with \$8000 to \$12,000 capital stock; W. J. Long, president, Bessemer; Jim H. Edmondson, general manager, Birmingham, Ala.; leased building; will remodel and equip for newspaper plant.

Fla., Tampa.—Printery.—Tampa Printing Co. incorporated with \$10,000 capital stock; J. A. Lyles, president; C. J. Bittman, vice-president and general manager; J. E. Baker, secretary-treasurer.

Ga., Barnesville.—Laundry.—W. R. Gardner & Son will establish laundry; erect 18x50-foot building; machinery order placed. (Recently noted.)

Ga., Dalton.—Steam Laundry.—L. J. Maloy of Copperhill, Tenn., leased building on Hamilton St. and will establish steam laundry.

Ga., Douglas.—Construction.—Company organized with \$5000 capital stock by Charles E. Jackson of 7 W. North Ave., Baltimore, Md.; R. N. McEachern of Buffalo, N. Y.; J. M. Ashley and J. W. Quincy, both of Douglas.

Ky., Henderson.—Contractors.—C. F. Kleiderer & Sons incorporated with \$10,000 capital stock by C. F. Kleiderer, E. L. Kleiderer and others.

Ky., Irvington.—Hardware, etc.—Irvington Hardware & Implement Co. incorporated with \$15,000 capital stock by J. D. Ashcraft, J. M. Herndon, E. H. Shelman and W. D. Ashcraft.

Ky., Lexington.—Garage.—T. B. Dewhurst leased portion of Phoenix Motor Car Co.'s building; will remodel and erect 127-foot addition, making that portion of building 20x27 feet; pressed brick lined with white brick; roof supported by steel trusses; concrete floors; fireproof.

Ky., Louisa.—Construction.—J. M. Turner Construction Co. incorporated with \$25,000 capital stock by M. Turner, C. L. Miller and F. T. B. Wallace.

Ky., Louisville.—Contracting.—W. C. Lewman & Co. incorporated with \$10,000 capital stock by Winnie C. Lewman of Prather, Ind.; Claud C. Payne of Salem, Ind., and Arthur B. Crowe of Louisville.

La., New Orleans.—Automobiles.—Imperial Motor Car Co. incorporated with \$5000 capital stock by W. E. Wisby, James Malochee and H. J. Malochee.

Md., Baltimore.—Plumbing, etc.—W. W. Adams & Sons incorporated with \$5000 capital stock by W. W. Adams, Frederick H. Adams, 19 N. Hare St., and others; heating, plumbing and general contractors.

Md., Baltimore.—Paper.—Russell Paper Co. incorporated with \$6000 capital stock by Horace M. Russell, James C. Robbins and Huntington D. Sawkins, 725 Appleton St.; to deal in paper.

Mo., Cameron.—Cemetery.—Cameron Cemetery Co. incorporated with \$12,500 capital stock by Ezra Downs, S. D. Thompson and H. M. Packard.

Miss., Meridian.—Laundry.—Meridian Laundry Co., recently reported incorporated with \$10,000 capital stock, has leased building and will install machinery for laundry; J. D. Pennington, president and treasurer; F. R. Hodges, vice-president; M. G. Henderson, secretary.

Mo., Kansas City.—Automobile Club of Kansas City will erect garage, office and club building; four stories.

Mo., St. Joseph.—Construction.—Missouri Valley Construction Co. incorporated with \$5000 capital stock by H. R. Peterman, W. K. Seitz and J. H. Barnes.

Mo., St. Louis.—Caloridol Heat Improvement Co. incorporated with \$5000 capital stock by Charles A. Goa, Jos. A. Goa and Irwin V. Barth.

Mo., St. Louis.—Printery.—Metropolitan Printing Co., recently reported incorporated with \$5000 capital stock, will erect 100x150-foot fireproof building; bids opened; machinery will cost \$5000; N. Buskin, president; D. Nemon, vice-president; D. Langey, secretary; B. Maslanikov, treasurer; L. Chernow, manager.

N. C., Charlotte.—Construction.—Goode Construction Co. incorporated with \$125,000 capital stock; A. J. Goode, president and manager; R. L. Goode, secretary-treasurer; will conduct general contracting business.

N. C., Margarettsville.—Farm Supplies.—Farm Supply Co. incorporated with \$25,000 capital stock by J. G. Bolton, B. H. Lanier and others.

N. C., Morganton.—Flume Lines.—Curtis Creek Flume Co. incorporated with \$5000 capital stock by Manly McDowell, E. P. Bennett and F. P. Gilliam.

N. C., Raleigh.—Automobiles.—Welfare Automobile Co. incorporated with \$25,000 capital stock by R. C. Welfare, William Woodward, W. H. Woodward and L. P. Woodward.

N. C., Wilmington.—Laundry.—City Laundry awarded contract to Rhodes & Underwood of Newbern, N. C., for erection of plant; two stories; brick; oriental brick front; stone trimmings; plate-glass front in storerooms; 60x140 feet; cost \$17,500; plans by Grossman & Mahler Architectural & Construction Co., Wilmington.

S. C., Charleston.—Crushed Stone.—Carolina Crushed Stone Co. incorporated with \$25,000 capital stock by Frank C. Ford, J. S. Hanahan and Geo. H. Moffett.

Tenn., Knoxville.—Plumbing.—W. H. Price Plumbing Co. incorporated with \$2500 capital stock by W. H. Price, J. G. Wright, W. W. Sharp and others.

Tenn., Memphis.—Taxicabs, etc.—Yeates Auto & Taxicab Co. incorporated with \$10,000 capital stock by Richard Yeates, I. L. Yeates, J. H. Newsom and others.

Tex., Beaumont.—International Cressoting Co. will rebuild plant reported damaged by fire; loss \$25,000.

Tex., Dallas.—Laundry.—Ideal Laundry Co. incorporated with \$40,000 capital stock by F. B. Slater, C. M. Brannon and C. F. Brannon.

Tex., Goliad.—Steam Laundry.—G. R. Renfro and J. W. O'Banna will establish steam laundry; organize company with \$2500 capital stock.

Tex., Goodnight.—Live-stock Ranch.—Goodnight American Buffalo Ranch Co., recently reported incorporated with \$300,000 capital stock, will open bids about April 1 for erection of buildings in connection with ranch to be established on 5228 acres of land; will start with 100 buffaloes, 75 half-breed buffaloes, 100 cattle, 200 Persian sheep, etc.; contemplates erection of hotel and several cottages; Charles Goodnight, president and treasurer; H. W. Taylor, vice-president; H. A. Fleming, secretary.

Tex., Houston.—Publishing.—Ye Towne

Crier Publishing Co. Incorporated with \$5000 capital stock by J. Lewis Dolan, E. H. Nelson and T. J. Haley.

Tex., Port Arthur—Shipyards.—J. Harvey of Chicago, Ill., will establish shipyard; ways to accommodate boats 200 feet long.

Tex., San Angelo—Grain Elevator.—Paul Garrett Milling Co. will establish \$15,000 grain elevator. (See "Flour, Feed and Meal Mills.")

Tex., San Antonio—Printery.—J. R. Wood Printing Co. increased capital stock from \$10,000 to \$25,000.

Va., Richmond—Contracting.—W. Benjamin Davis & Co. incorporated with \$10,000 capital stock; W. Benjamin Davis, president; Thos. B. Davis, secretary-treasurer.

W. Va., Huntington—Hardware.—Groves-Terry Hardware Co. incorporated with \$10,000 capital stock by A. H. Groves, A. B. Terry, J. C. Beffy and others.

W. Va., Welch—Publishing.—McDowell Recorder, W. W. Logan, editor, will rebuild plant reported burned.

W. Va., Welch—Construction.—Vaughan Construction Co. incorporated with \$5000 capital stock by J. L. Vaughan, L. H. Vaughan, J. B. Vaughan and others.

MISCELLANEOUS FACTORIES

Ala., Birmingham—Syrup.—Southern Syrup Co. will erect factory building; two stories; brick; cost \$6000.

Ala., Montgomery—Illumination Process.—L'italite Co. incorporated with \$2000 capital stock by D. W. Troy, R. E. Troy and R. E. Seibels.

Ark., Fort Smith—Refinery.—Arkansas Refining Co. incorporated with \$100,000 capital stock by Charles Madison, B. J. Young and R. R. Cravens.

Ark., Polk County—Slate.—National Slate Co., F. R. Madala, general manager, 320 Reliance Bldg., Kansas City, Mo., will construct slate mill at quarries in Polk county; 40x100 feet; frame, brick or concrete. (See Mo., Kansas City.)

Ark., Rogers—Marble Works.—Charles O. Mitchell, proprietor of Bentonville (Ark.) Marble Works, will erect brick building and establish marble works.

Ga., Cedartown—Paper Boxes, etc.—F. E. Kuster Company incorporated with \$50,000 capital stock by F. E. Kuster, C. T. Kidd, S. N. Noble and others.

Ga., Rome—Trousers, etc.—Sanders-Glover Pants & Tent Co. changed name to Harbour-Rankin Manufacturing Co. and increased capital stock to \$22,000; will erect addition, install additional equipment and double capacity.

Ga., Savannah—Oil.—Phosphorized Oil Co. incorporated with \$5000 capital stock by R. L. Clancy, R. W. Hohenstein and F. B. Gibson.

Ky., Louisville—Candy.—Continental Candy Co. incorporated with \$3000 capital stock by Richard D. Bakrow, Emanuel Bakrow and others.

Ky., Louisville—Distillery.—United American Company incorporated with \$650,000 capital stock; Albert S. Roth, president, Cincinnati, O.; E. Emmett Kirwan, secretary-treasurer, Louisville; purchased Warwick distillery at Silver Creek and another on Illinois Central Railroad near Louisville from Bernheim Distilling Co.; combined annual capacity 45,000 barrels of whiskey; storage capacity 75,000 barrels.

La., Loreauville—Sugar.—Adrien Consoulin will probably rebuild Marla Central Sugar Factory reported burned; estimated loss \$200,000.

La., Baton Rouge—Rice Mill.—W. H. Hunter of Crowley, La., is considering Baton Rouge as location for proposed rice mill.

La., Eunice—Rice Mill.—W. H. Hunter, Crowley, La., is considering Eunice as location for proposed rice mill.

La., New Orleans—Novelties.—Orva C. Williams of Chicago, Ill., will not establish branch plant to manufacture notions and novelties. (Recently noted.)

Md., Baltimore—Medicine.—Our Home Remedy Co. incorporated by Geo. A. Mathews, 2504 N. Charles St.; Joseph E. Geigan, 302 Law Bldg., and Harry Hechheimer, 102 W. 24th St.

Md., Baltimore—Skirts, etc.—Model Cloak & Suit Co. incorporated with \$3000 capital stock by Harris Berger, Charles W. London and Morris D. Robinson, 111 N. Charles St., to manufacture suits, cloaks and skirts.

Md., Baltimore—Piano Players.—J. P. Caulfield & Co., 102 N. Charles St., leased 15,000 feet floor space in building at Hillen and Exeter Sts.; will equip for manufacture of self-playing piano action.

Md., Baltimore—Amusement Devices.—Cam-

den Coaster Co. incorporated with \$10,000 capital stock by Guy Moore, 721½ W. Saratoga St., Walter T. Wells and others.

Md., Baltimore—Ice Cream.—Pure Food Ice Cream Co. incorporated by Jerome B. Waldeck, 423 Scott St., Chas. A. Waldeck and Annesley E. Hodson, Jr.

Md., Baltimore—Aeroplanes.—Brown Aeroplane Co. incorporated with \$5000 capital stock by Edw. R. Brown, John M. Mann and Clyde E. Loose, 1327 Bolton St. (Previously noted.)

Md., Baltimore—Candy.—Howard Candy Co. incorporated by Frank Campbell, Leonard P. Gillis and J. L. Murphy, all of 9 S. Howard St., to manufacture candy; equipment installed.

Md., Baltimore—Electrical Devices.—Monitor Controller Co. incorporated with \$5000 capital stock by Wm. B. Turner, Wm. T. Holmes and Chas. R. Durling, 106 S. Gay St., to manufacture mechanical and electrical devices.

Md., Baltimore—Non-refillable Bottles.—International Non-refillable Bottle Co. incorporated with \$100,000 capital stock by Frank P. Knight, Kate Ave., Reisterstown Rd.; Charles N. Boulden, 19 E. Saratoga St., Baltimore, and George G. Steigler, Wilmington, Del.

Md., Hagerstown—Ice Cream.—L. M. Greenwalt will enlarge ice cream factory by installation of refrigerating plant and additional machinery; cost \$6000.

Md., Hagerstown—Leggings.—Hagerstown Legging Co. incorporated with \$30,000 capital stock; Lewis T. Byson, president; Harvey H. Heyser, treasurer, both of Hagerstown; W. J. Campbell, vice-president; Robert L. Campbell, secretary; will establish plant to manufacture leather and canvas leggings, etc.; has leased building.

Md., Hagerstown—Heaters.—Hagerstown Combination Heater Co. organized; Harry E. Baker, president; Charles S. Lane, Jr., treasurer; R. S. Stevenson, secretary; will establish plant to manufacture combination heater.

Md., Havre de Grace—Crushing and Grinding.—Deland Mining & Milling Co. contemplates erection of addition to plant. (See "Machinery Wanted.")

Miss., Gulfport—Naval Stores.—Yargan Naval Stores Co. will, it is reported, expend \$150,000 to double capacity of plant.

Mo., Kansas City—Lime, etc.—Kansas City Lime & Cement Co. incorporated with \$50,000 capital stock by William D. Pratt, Geo. T. Cook, J. Marsereau and others.

Mo., Kansas City—Bolts, Nuts, etc.—Kansas City Bolt & Nut Co. will erect fireproof structures to replace burned buildings recently noted; plans and construction by company.

Miss., Natchez—Confectionery.—Leonard Voss Company, recently reported incorporated with \$10,000 capital stock, will operate plant recently owned and operated by Leonard Voss; A. B. Westmoreland, president; Lennie V. McCrea, vice-president; Thomas A. Voss, secretary; Mary A. Voss, treasurer.

Mo., Kansas City—Slate.—National Slate Co., F. R. Madala, general manager, 320 Reliance Bldg., will erect two mills; one at quarries, in Polk county, Arkansas, and one at Leeds, in Blue Valley; size of each mill, 40x100 feet; frame, brick or concrete; plans not definite; engineer not engaged; machinery order placed; monthly capacity, 10,000 to 20,000 linear feet of slate for interior finish. (Recently reported.)

Mo., St. Louis—Railway Crossings.—Griffith Railway Crossing Co. incorporated with \$50,000 capital stock by Deles R. Haynes, Robert H. Kern and William P. Nelson.

Mo., St. Louis—Household Novelties.—Mutual Advertising & Manufacturing Co. incorporated with \$300,000 capital stock by Wm. H. Prince, Samuel W. Tate, Albert F. Stafford and others.

Mo., St. Louis—Electrical Apparatus.—Radio Gas Producer Co. incorporated with \$50,000 capital stock by J. W. Kolar, A. J. Cunningham, M. C. Burgman and others.

Tenn., Chattanooga—Phonographs.—Multiplex Phonograph Co. incorporated with \$40,000 capital stock by D. T. Blakey, W. F. Nell, D. W. Hughes, J. W. Johnson and R. H. Williams.

Tenn., Jackson—Drugs.—Southern Drug Co. incorporated with \$50,000 capital stock; Aaron Tuchfeld, president; J. C. Edenton, vice-president; F. B. Fisher, treasurer; Theo. W. Larwill, secretary.

Tenn., Jackson.—L. E. Mathis contemplates organization of company to manufacture hames. (See "Machinery Wanted.")

Tex., Brownsville—Hats.—Lon Hines of San Antonio, Tex., will establish factory to manufacture hats from Texas palm; machinery purchased. (Harrington and Browns-

ville, Tex., recently noted as probable locations.)

Tex., Dallas—Carbonic-acid Gas.—Bishop & Babcock, 525 Garfield Bldg., Cleveland, O., will establish plant to manufacture carbonic-acid gas; plans not completed.

Tex., Fort Worth—Trousers.—Miller Manufacturing Co. increased capital stock from \$30,000 to \$100,000.

Tex., Gollad—Brooms.—Otto Foerster is promoting establishment of broom factory.

Tex., Houston—Cast-Iron Cylinders, etc.—Texas Welding & Gas Compressing Co. will erect building and double capacity of plant for manufacturing cast-iron cylinders, etc., by patent autogeneous welding process.

Tex., Houston—Vinegar.—Hoosier Vinegar Co. of San Antonio, Tex., will establish plant; erect warehouse for distributing station.

Tex., Orange—Rice Mill.—E. W. Brown purchased and is installing machinery for grinding rice for feed and to clean rice; also 12-horse-power gasoline engine to operate chop mill; will erect number of tenant-houses; construction begun.

Tex., Prairie View—Gloves and Overalls.—Prairie View Development Co. of Houston, Tex., plans establishing white duck glove and overall factory; not a cotton-duck mill, as lately reported. (See "Machinery Wanted.")

Tex., Vernon—Implements.—Shive-Napier Implement Co. incorporated with \$10,000 capital stock by T. H. Shive and S. M. Napier of Vernon and J. M. Napier, Chillicothe, Tex.

Tex., Wichita Falls—Automobiles.—Wichita Falls Motor Car Co. will be incorporated with \$100,000 capital stock by Charles Adams, Robert J. Shefferly, both of Detroit, Mich., and others; will establish plant to manufacture auto delivery trucks and wagons; 50,000 square feet of floor space.

Tex., Rosenberg—Creamery.—Rosenberg Creamery incorporated with \$5000 capital stock by J. W. Melninger, R. H. Lane and F. N. Joeger.

Va., Norfolk—Brooms.—F. A. Bunkley awarded contract to R. M. Perkins, Norfolk, for erection of addition to broom factory; two stories; frame; metal roof; cost \$1200.

Va., Skyland—Acetylene-gas Plant.—Frank E. Stover is preparing bids for installation of acetylene lighting plant.

W. Va., Elkins—Gears.—Clark Gear Co. incorporated with \$30,000 capital stock by P. E. Clark, R. Chaffey and others.

W. Va., Parkersburg—Builders' Supplies.—Parkersburg Builders' & Supply Co. will rebuild plant recently reported burned; loss \$5000.

W. Va., Parkersburg—Ice Cream.—Imperial Confectionery Co. awarded contract to C. A. Miller, Parkersburg, for erection of plant; two stories; brick; 35x70 feet; daily capacity 2000 gallons of ice cream; cost \$20,000; plans by J. R. Livezey, Philadelphia, Pa. (Other details lately noted.)

W. Va., Sinks Grove—Creamery.—Blue Grass Creamery Co. organized with R. B. Nickell, president; T. W. Scott, secretary-manager; R. H. Leech, treasurer.

W. Va., Wheeling—Vacuum Cleaners.—Hydraulic Vacuum Cleaner Co. incorporated with \$25,000 capital stock by James P. Hanley, Jos. E. Robinson, Geo. T. Digby and others.

RAILWAY SHOPS, TERMINALS, ROUNDHOUSES, SHEDS, ETC.

Ky., Earlinton—Louisville & Nashville Railroad, W. H. Courtenay, chief engineer, Louisville, Ky., will, it is reported, erect 10-stall roundhouse and machine shops.

Md., Baltimore.—Northern Central Railway Co., Calvert and Center Sts., is receiving bids for two electro-pneumatic signal stations at Maryland Ave. and between Calvert St. and Guilford Ave.; terra-cotta block, hollow-tile construction, generally fireproof; steam heat; electric lights; M. C. Davis, 15 E. Fayette St.; Edward Brady & Son, 111 Cathedral St.; and J. Henry Miller, Inc., 108 Dover St., all of Baltimore, and Roydhouse-Arey Company, Philadelphia, are estimating. (Previously mentioned.)

Tex., Galveston.—Gulf, Colorado & Santa Fe Railway, F. Merritt, chief engineer, Galveston, Tex., has about completed budget for 1911 calling for expenditure of about \$750,000 for improvements on lines in Texas, Oklahoma and Louisiana; about \$150,000. It is estimated, will be expended on Galveston division; improvements decided upon for Galveston include construction of 16-stall brick and concrete engine-house, \$40,000; standard sandhouse, \$1750; 60x100-foot brick machine and blacksmith shop, with boiler-rooms, \$8000; standard 85-foot turntable and motor, \$7500; oil and store-house, with office

and platform 70x100 feet, \$17,000; track changes in Galveston yards at 42d St., \$15,000, and new machinery and tools, about \$10,000; buildings planned are to be of brick or reinforced concrete.

ROAD AND STREET WORK

Ala., Tuscaloosa.—City will receive bids February 2 for construction of 19,000 square yards of brick, wood block, sheet asphalt or bitulithic pavement recently noted; W. B. Nicoll, City Engineer. (See "Machinery Wanted.")

Fla., Palatka.—City awarded contract to Southern Paving & Construction Co., Chattanooga, Tenn., for street paving as follows: For 5671 square yards on edge at \$1.34, total \$7599.14; flat at \$1.23, total \$6985.33; for 3837 linear feet granite curbing at 37 cents, total \$1419.69; work to be completed by April 15. (Recently mentioned.)

Fla., St. Petersburg.—City awarded contract to Georgia Engineering Co., Augusta, Ga., for grading, paving and curbing streets; work will include removal of 15,000 cubic yards of earth; 40,000 square yards of paving, brick laid flat; 5000 square yards paving, brick laid on edge, and 43,000 linear feet granite curbing; contract price is 23 cents per cubic yard for grading; brick laid flat, \$1.40 per square yard; brick laid on edge, \$1.60 per square yard, and for granite curbing, 4½ cents per linear foot. City also awarded contract to Eureka Stone & Paving Co. of St. Petersburg for cement sidewalk between 2d and 3d Sts.; W. F. Divine, City Clerk. (Recently mentioned.)

Fla., Tampa.—Tampa Bay Land Co. will grade and pave three and three-quarters miles of road from northern boundary of South Tampa to south line of Section 10, Township 30 south; paving to be 10 feet wide and 10 inches thick; material, shell; bids will be received until February 7. (See "Machinery Wanted.")

Ga., Augusta.—Street and Drain Committee will receive bids January 23 for furnishing and setting stone curbing and laying cement sidewalks which may be ordered by City Council during 1911; Nisbet Wingfield, City Engineer and Commissioner of Public Works. (See "Machinery Wanted.")

Ga., Thomaston.—Upson county will vote February 13 on issuance of \$100,000 of bonds for road improvements. Address County Commissioners.

La., Pointe a la Hache.—Plaquemines Parish Police Jury adopted resolution providing for construction of shell road from St. Bernard county line to courthouse at Pointe a la Hache, distance of about 32 miles; estimated that \$40,000 bond issue, with similar amount from State highway fund, will be sufficient to cover cost; election will be held.

Md., Accident.—Garrett county will construct road between Friendsville and Accident; cost about \$1500. Address County Commissioners.

Md., Baltimore.—Board of Awards approved specifications prepared by department of B. T. Fendall, City Engineer, for grading and paving with cobblestones four streets in South Baltimore, in connection with crossing plans of Baltimore & Ohio Railroad; streets are Eutaw from Fremont Ave. to Henrietta, Hamburg from Howard to Sharp, Howard from Cross to Henrietta, and Hamburg from Putaw to Warner; will receive bids until January 25. (See "Machinery Wanted.")

Md., Baltimore.—Harbor Board approved plans of Oscar F. Lackey, Harbor Engineer, City Hall, for water-front street and municipal dock to be built in South Baltimore; decided to widen Light St. to 120 feet as far as Hill St., at which point proposed street, which is to be 106 feet wide, with sidewalks 10 feet wide, will cut diagonally across to Hughes Ave. and William St.; it will extend along Hughes Ave. (which is to be widened on south side to point 90 feet east of Covington St.); then to Montgomery St., curving around Federal Hill Park; new street at present will end at Montgomery St., but later may be extended to Locust Point; new dock is to be built at intersection of Covington St. and Hughes Ave., and will have slip on either side; cost will be provided out of \$2,000,000 dock loan. (Recently mentioned.)

Md., Easton.—City will improve streets. Address The Mayor.

Miss., Hazlehurst.—Copiah County Board of Supervisors ordered sale of \$75,000 of bonds, proceeds to be used for road construction. (Recently mentioned.)

Miss., Tupelo.—City contemplates voting on issuance of bonds for paving certain streets. Address The Mayor.

Mo., Independence.—Jackson County Commissioners awarded contract to W. R. Latimer of Independence at \$3034 to grade road extending north from Fairmount Church,

three miles east of city, to intersection with Sping Branch rock road; length of road, 5500 feet.

Mo., Joplin.—Good Roads Committee, Chris Guengerth, chairman, is prepared to begin construction of macadamized road from 32d and Main Sts. west to Tanyard Rd.; City Council instructed J. B. Hodgdon, City Engineer, to make survey.

N. C., Newbern.—City will pave Pollock, Craven, Graves, Griffith and East Front Sts. and Avenue A. Address The Mayor. (Bond issue of \$50,000 recently reported voted for street improvements.)

Okla., Oklahoma City.—City will pave north and south alley of Block 16, Original Plat, total width of 20 feet, with sheet asphalt on five-inch Portland cement-concrete foundation; east and west alley of Block 63, Original Plat, width of 20 feet, with vitrified brick on five-inch Portland cement-concrete foundation; bids received until January 23; Bob Parman, City Clerk. (See "Machinery Wanted.")

Okla., Tulsa.—City will pave and otherwise improve streets in various improvement districts; Board of Commissioners will receive bids until January 27. (See "Machinery Wanted.")

Tenn., Chattanooga.—Board of Public Works decided to pave Terrace St. from 6th to 9th with vitrified brick, 4th St. from Chestnut to Market with asphalt, and 10th St. from Georgia Ave. to King St. with brick; bids will be invited on asphalt macadam, asphalt, brick and concrete for remaining streets in newly-created paving districts; Robert Hooke, City Engineer.

Tenn., Cookeville.—Putnam county will vote February 25 on issuance of \$100,000 additional bonds for road improvements. Address County Commissioners.

Tenn., Newport.—Coke county will grade about 18 miles and macadamize about 35 miles of roads; bids to be received until January 27; George W. Gorrell, secretary Pike Commission. (See "Machinery Wanted.")

Tex., Aransas Pass.—City voted issuance of \$20,000 of bonds for street improvements. Address The Mayor.

Tex., Beville.—City contemplates paving Washington St. for distance of five blocks with vitrified brick. Address The Mayor.

Tex., Dallas.—City will pave Haskell and Worth Sts., and will grade Peak St. from Main to Perry Sts.; William Doran, Street Commissioner.

Tex., Fort Worth.—City voted issuance of \$165,000 of bonds for street improvements; J. D. Trammell, City Engineer. (Recently mentioned.)

Tex., Fort Worth.—City Commission approved transfer of contracts from Metropolitan Paving Co. to Reuch & Ranigan, Memphis, Tenn., for paving of 14 city streets; about \$200,000 is involved.

Tex., Fort Worth.—Northern Texas Traction Co. will expend \$500,000 for paving, which is its share of expenses of paving which City Commissioners have ordered for 1911.

Tex., Grand Saline.—City will lay concrete sidewalks on each side of Frank St. from Spring to Green St. Address The Mayor.

Tex., Hillsboro.—City Council decided to advertise for bids until January 24 for paving public square and streets leading into same in fire district; work consists of 31,500 square yards paving and 12,711 linear feet combination curb and gutter; E. L. Dalton, civil engineer, Dallas, Tex., has been engaged to supervise work; \$40,000 bond issue available. (Recently mentioned. See "Machinery Wanted.")

Tex., Mexia.—City will soon begin additional street improvements, for which \$30,000 bond issue is available. Address The Mayor.

Tex., Orange.—City will grade and shell Border, Division, 7th and other streets; has purchased shell bank on Sabine River. Address The Mayor.

Tex., Wichita Falls.—City voted additional \$25,000 bond issue for street paving; total of \$45,000 available, \$20,000 bond issue having lately been sold; bids will be opened January 17. Address The Mayor.

Va., Amherst.—Amherst county voted issuance of \$135,000 of bonds for road improvements. Address County Commissioners.

Va., Norfolk.—Board of Control furnished to Berkley Ward Improvement Committee following estimates of cost of paving Eighthward streets: Pave and gutter Middleton and Walnut Sts., \$1558.20; pave 11th St., \$3422.50; W. T. Brooke, City Engineer.

W. Va., Parkersburg.—Wood county will vote February 21 on issuance of \$175,000 of bonds for paving about 10 miles of road leading to city, all of which is in Parkersburg district. (Recently mentioned.)

SEWER CONSTRUCTION

Fla., St. Petersburg.—City awarded contract to E. B. Cooper of St. Petersburg to construct sewer system No. 15; total length, 4960 feet; 690 feet of 10-inch pipe, 3100 feet of 6-inch pipe and 1200 feet of 8-inch pipe.

Ga., Augusta.—Health Committee will receive bids until January 23 for constructing pipe sewers which may be ordered by City Council during 1911; Nisbet Wingfield, City Engineer and Commissioner of Public Works. (See "Machinery Wanted.")

Ga., Gainesville.—City will expend \$100,000 to extend sewer and water-works system; date of opening bids not set; E. B. Epps, City Engineer, and J. W. Barnett, consulting engineer, Athens, Ga., are preparing plans, and will arrange for construction. (Recently noted.)

Md., Easton.—City will vote February 23 on of sewer system with disposal plants; plans are being prepared by Clyde Potts, 30 Church St., New York.

Mo., Glasgow.—City has decision legalizing \$30,000 bond issue for construction of sewer system, water-works and electric-light plant. Address The Mayor.

Okla., Tulsa.—Water and Sewer Commission, J. H. Wheatley, Commissioner, contemplates expending about \$15,000 to construct sanitary sewers in East End; one sewer main, 18 inches in diameter, will begin at intersection of Cheyenne Ave. and Arkansas River and will continue to northeast; this main will have several branches of about 10 inches in diameter; T. C. Hughes, City Engineer.

Tex., Dallas.—City invites bids for laying storm sewer on Haskell St. from San Jacinto to Live Oak St. at estimated cost of \$3538.48, and on Haskell St. from Victor to Gaston Sts. at a cost of \$4754.98; William Doran, Street Commissioner.

Tex., Fort Worth.—City voted issuance of \$120,000 of bonds for construction of storm sewers; J. D. Trammell, City Engineer. (Recently mentioned.)

Tex., Wichita Falls.—City was awarded contract for construction of sewers. Address The Mayor. (Recently mentioned.)

Va., Colonial Beach.—City voted January 12 on issuance of \$37,000 of bonds for construction of sewer system, etc.; plans not made; H. W. B. Williams, Mayor.

Va., Skyland.—Frank E. Stover, Luray, Va., is arranging, it is reported, for construction of sewer system.

W. Va., Annabelle.—Four States Coal & Coke Co. plans construction of sewer system and water-works to cost \$50,000; general offices in Frick Bldg., Pittsburg, Pa.

W. Va., Moundsville.—City voted issuance of \$170,000 of bonds for construction of sanitary-sewer system; also surface drainage; work will include about 24 miles of sanitary sewers, varying in size from 6 inches to 36 inches in diameter; bids will be received for construction about March 1; J. M. Williamson, Mayor; Charles E. Collins, Philadelphia, Pa., is engineer.

TELEPHONE SYSTEMS

Ark., Helena.—Helena & Lakeview Telephone Co. will install at least six additional stations.

Ga., Gainesville.—Gainesville & Oakwood Telephone Co. incorporated by G. T. Cook, J. N. Wallis, T. W. McDonald and others; will construct telephone line between Gainesville and Oakwood, Ga.

Ky., Ashville.—Citizens' Telephone Co. incorporated with \$3000 capital stock by E. W. Elliott, J. C. Bruce, J. G. Coffman and others.

Ky., Hazard.—Jackson-Hazard Telephone Co., William Strong, president, incorporated with \$10,000 capital stock, will construct local and long-distance telephone system from Jackson to Potters Fork, Ky., distance of 15 miles; will construct and repair three exchanges.

La., Baton Rouge.—Cumberland Telephone Co., Leland Hume, general manager, Nashville, Tenn., will, it is reported, construct telephone line between Baton Rouge and Crowley, La.

N. C., Kernersville.—Sedge-Jordan Telephone Co. incorporated with \$10,000 capital stock by D. W. Sink of Winston-Salem, N. C., and others.

Tex., Dallas.—Dallas Automatic Telephone Co., J. C. Casler, president, will erect branch telephone exchange on Park Row; connect with main exchange by underground conduit.

TEXTILE MILLS

Ga., Lagrange.—Cotton Cloth.—Dunson Mills will organize with J. E. Dunson presi-

dent, J. M. Barnard vice-president, T. J. Thornton general manager and treasurer, W. S. Dunson superintendent; will erect plant of 20,000 spindles and looms to match; award building contracts soon; machinery contracts awarded; J. E. Sirrine of Greenville, S. C., is architect and engineer in charge; capital stock, \$500,000. (Lately mentioned.)

Ga., Monticello.—Cotton Cloth.—Castle Cotton Mills organized with \$1,000,000 capital stock by Wm. T. Lang of West Point, Ga.; L. O. Benton, W. L. Kelly, D. N. Harvey and others of Monticello; electrical drive; reinforced concrete buildings.

Ga., Villa Rica.—Knit Goods.—J. T. Fuller will establish Fuller Knitting Mills. (Previously reported as to build plant capitalized at \$10,000.)

Md., Baltimore.—Nets and Twine.—W. & J. Knox Net & Twine Co. will build two-story 45x66-foot brick and concrete addition; has plans and specifications; plant at Johnson and Barney Sts.; offices at Lombard and Calvert Sts.; bidders on building are B. F. Bennett Building Co., 123 S. Howard St.; Charles I. Stockhausen, Gay and Water Sts.; J. Henry Smith, 116 S. Register St.; John Cowan, 106 W. Madison St., all of Baltimore.

Miss., Barnett—Lace.—Samuel Stevenson will, it is reported, establish lace mill.

Mo., St. Louis.—Oilcloth.—National Oilcloth Co. will incorporate with \$75,000 capital stock; leased plant buildings and will install machinery for daily capacity of 24,000 yards oilcloth; William Nesbitt will be president.

S. C., Greenville.—India Lawns, etc.—Westervelt Mills has organized; president and treasurer, J. I. Westervelt; vice-president, W. B. Smith; secretary, C. E. Tatch; capital stock, \$1,000,000; build 50,000-spindle and 1200-loom plant to manufacture India lawns and linens. (Details of buildings, etc., reported recently.)

S. C., Iva.—Sheeting.—Jackson Mills propose increasing capital stock from \$120,200 to \$350,000; present equipment, 21,504 ring spindles and 640 narrow looms.

Tex., Austin.—Hosiery.—J. Calvin Hess of Philadelphia, Pa., is reported as planning organization of company to establish hosiery knitting mill.

Tex., Wichita Falls.—Cotton Cloth.—H. A. Emerson and J. A. Kemp are interested in plan to establish cotton mill.

WATER-WORKS

Ala., Talladega.—City Council appropriated \$10,000 for extension of water and gas mains. Address The Mayor.

Ark., Blytheville.—City Council granted water-works franchise to J. E. Thompson, Nashville, Tenn.

Ga., Dalton.—City has engaged H. S. Jaudon Engineering Co., Savannah, Ga., to prepare plans for water-works; capacity, 2,000,000 gallons; construct concrete reservoir; cost \$30,000; open bids about February 16. (Recently noted. See "Machinery Wanted.")

Ga., Fort Valley.—City will drill artesian well; purchased traction engine and other well-drilling machinery; work to be in charge of J. J. L. Fincher, Superintendent of Public Works.

Ga., Gainesville.—City will expend \$100,000 to extend water-works and sewer system; date of opening bids not set; E. B. Epps, City Engineer, and J. W. Barnett, Athens, Ga., consulting engineer, are preparing plans, and will arrange for construction. (Recently noted.)

Ga., Swainsboro.—City contemplates, it is reported, voting on bond issue for construction of water-works; Jesse Thompson, Mayor.

Md., Baltimore.—Water Department, Alfred M. Quick, Water Engineer, City Hall, will soon have plans for dam to be constructed near Loch Raven; dam will be 237 feet above mean tide and impound about 20,000,000 gallons of water; plans will provide for possible increase in height of dam to 275 feet, which would increase impounding capacity to about 58,000,000 gallons; two sets of plans are being prepared, one providing for dam straight across river and other for dam curved upstream; awarding of this contract will begin actual work of improving water supply out of \$5,000,000 loan; as soon as work on dam progresses filtration plant with capacity of 120,000,000 gallons daily will be built, also provided for out of \$5,000,000 loan. (Previously mentioned.)

Md., Cumberland.—James H. Fuertes of New York, engineer engaged to report on most feasible source of water supply, has completed survey from city to source of Evert's Creek, Potomac River to above Lake, and Savage River, together with topography of same; also surveyed Shriver's Hill as site for reservoir; Legislature authorized \$500,000 bond issue to be submitted to vote.

Mo., Chaffee.—City will expend \$20,000 for extension of water-works, including 27,000 feet of six-inch cast-iron pipe; M. S. Murray, Silkeston, Mo., is engineer; J. M. Massengill, Mayor. (Recently noted.)

Mo., Edina.—Dan H. Mudd, Mayor, will drill test well under supervision of J. S. Worley Company, Kansas City, Mo.; City Council has taken no action on construction of water-works recently noted.

Mo., Glasgow.—City has decision legalizing \$30,000 bond issue for construction of water-works, electric-light plant and sewerage system. Address The Mayor.

Mo., Hopkins.—City contemplates construction of high-duty pumping plant and water-distribution system. Address The Mayor.

Mo., Warrenton.—City awarded contract to Des Moines Bridge & Iron Co., Des Moines, Ia., at \$6220 to construct water-works; contract includes furnishing and laying pipe, castings, hydrants, valves, 40,000-gallon steel tank and 82-foot steel tower; plans by Fuller-Coulit Company, Chemical Bldg., St. Louis, Mo. (Previously mentioned.)

Okla., Custer City.—City contemplates construction of water system; 1200 population; Scott Stine, president of Board of Trustees. (See "Machinery Wanted.")

Tenn., Manchester.—City is considering establishment of water-works and electric-light plant; W. P. Hickerson, president First National Bank, may be addressed.

Tenn., Memphis.—Shelby county contemplates drilling artesian well to furnish water to courthouse; cost about \$5000; George B. Coleman, chairman of committee.

Tex., Aransas Pass.—City voted issuance of \$25,000 of bonds for construction of water-works. Address The Mayor.

Tex., Center.—City is expending \$20,000 to construct water-works; Randall-Lovegrove-Wyman, engineers in charge, Houston, Tex. (Contract previously noted awarded.)

Tex., Fort Worth.—City voted issuance of \$150,000 of bonds for improvement of water-works and surface reservoir; J. D. Trammell, City Engineer. (Recently mentioned.)

Tex., Fort Worth.—City will install duplicate air compressor in water-works plant; 48-stroke machine; contract awarded at \$21,574; J. D. Trammell, City Engineer.

Tex., Gainesville.—City voted issuance of \$150,000 of bonds for purchase and improvement of plant of Gainesville Water Co.; J. W. Puckett, Mayor. (Recently mentioned.)

Tex., Georgetown.—City has engaged F. H. Lancashire, Dallas, Tex., to extend water-works and electric-light plant; cost \$31,675; city will receive bids until January 23 for furnishing about 300 tons of class "B" cast-iron water pipe; R. E. Ward, Mayor. (Recently mentioned. See "Machinery Wanted.")

Tex., Taylor.—Andrew J. Zilker, Austin, Tex. (recently stated to have purchased Taylor Water Co.'s plant) has signed contract agreeing to build concrete pump-house at San Gabriel River, source of water supply; increase water supply to four times present amount; replace all wrought-iron mains, both in city and on San Gabriel line, with cast-iron pipe; lay 10-inch mains instead of 6-inch mains and install additional pumps and boilers; estimated cost, \$10,000.

Va., Colonial Beach.—City voted issuance of \$37,000 worth of bonds for construction of water-works, sewerage and other improvements. H. W. B. Williams, Mayor.

Va., Skyland.—City contemplates extending water-works. Address The Mayor.

W. Va., Annabelle.—Four States Coal & Coke Co. plans construction of water-works and sewer system to cost \$50,000; general offices in Frick Bldg., Pittsburg, Pa.

WOODWORKING PLANTS

Ala., Birmingham.—Wagons.—P. B. and S. H. Matthews of Birmingham Buggy Co. will erect wagon plant at Ave. E and 18th St.; 7x150 feet; four stories; concrete; plant will include down-draft blacksmith shop with 10 fires; estimated cost, \$75,000 to \$100,000.

Ala., Montgomery.—Spokes, etc.—Dixie Hardwood Manufacturing Co. incorporated with \$3000 capital stock; will continue operation of plant to manufacture auto and wagon spokes, cotton-mill specialties, shuttle blocks, etc.; C. H. Bartlett, president and secretary-treasurer; J. T. Robinson, vice-president.

Ala., Montgomery.—Boxes.—Southern Sash & Door Co. contemplates installing additional machinery in box factory.

La., Roseland.—Veneer Boxes, etc.—Rose-land Veneer & Package Co., R. A. Kent, president, will not enlarge plant as was recently reported.

N. C., Lexington.—Chairs.—Lexington Chair Co. incorporated with \$50,000 capital stock by

George W. Montcastle and W. E. Holt, both of Lexington; George L. Hackney and Frank M. Weaver of Asheville, N. C., and Frank S. Lambeth of Thomasville, N. C.

N. C., Washington.—Buggies.—Washington Buggy Co., recently reported incorporated with \$120,000 capital stock by George Hackney, Jr., E. N. Hackney and Henry McMullan, will continue operating plant already established.

S. C., Kershaw.—Vehicles, etc.—Conder Vehicle & Furniture Co. incorporated with \$10,000 capital stock; Lewis Conder, president; J. W. Powers, vice-president; J. H. Mobley, secretary-treasurer.

Tenn., Harriman.—Heading.—Harriman Heading Co. incorporated with \$5000 capital stock by J. E. Davidson, C. A. Wallinger, E. A. Wallinger, B. P. Kurtz and J. W. Scott.

Tenn., Nashville.—Staves.—S. G. Holland Stave Co. incorporated with \$100,000 capital stock by S. G. Holland, D. G. Hart, Pitt Henslee, J. E. Nesbett and George Lovell.

Tex., Dallas.—Coffins.—Dallas Coffin Co. increased capital stock from \$50,000 to \$150,000.

Va., Portsmouth.—Portsmouth Woodworking Co. incorporated with \$5000 capital stock; J. F. McCullough, president; J. W. Outten, secretary; E. W. Rabb, treasurer.

BURNED

Ala., Saltpa.—J. M. Deas' sawmill; loss about \$3500.

Ark., Blytheville.—Hubert Jones' residence; E. Thekeld's residence; Edwards Block; Bertib & Co.'s store; Spot Cash Grocery Co.'s store; City Drug Co.'s store; Glenn Drug Co.'s store; Blytheville Drug Co.'s store; Blytheville Photograph Co.'s building; offices of J. F. Wood, G. W. Parker and Byrd Realty Co.; Blytheville Hotel; loss about \$300,000.

Ark., Gravette.—Laughlin Hotel, owned by Mrs. S. A. Blevins.

Ark., Havana.—Jennings & Ray's cotton gin; loss \$3000.

Fla., Jacksonville.—S. B. Hubbard's store; loss \$50,000 to \$75,000.

Ga., Commerce.—T. E. Key's residence; loss \$4000 to \$5000.

Ga., Commerce.—Apple Valley Cotton Gin, owned by H. O. Willford; loss \$4000.

Ga., Garfield.—Cottonseed Oil Co.'s building; loss \$65,000 to \$75,000.

Ga., Macon.—Mrs. Lee Worsham's residence; loss \$4000.

Ga., Waynesboro.—James Chance's residence; loss, \$3300.

Ky., Hardin.—L. C. Starks Company's store and postoffice; Hardin Telephone Co.'s plant; Green & Ward's restaurant; Tom Miller's building; Faircloth Undertaking Co.'s building; Irvin, Hughes & Jones' store; L. Jeffries' store; J. M. Starks' building; loss \$15,000.

Ky., Louisa.—G. W. Atkinson's residence; loss on building \$16,000.

Ky., Whitesburg.—Joe Renfro's residence at Tacoma; loss, \$5000.

La., Loreauville.—Maria Central Sugar Factory, owned by Adrien Consoulin; estimated loss, \$200,000.

Md., Elkton.—Herman Dayett's sawmill; loss about \$2000.

Md., Leeds, R. F. D. from Childs.—Harlan Bros.' binder board mills; loss \$12,000 to \$15,000.

Miss., Louisville.—Moorehead Bros.' saw and grist mill and cotton gin; loss, \$3000.

Miss., Tunica.—Cotton gin owned by Mrs. H. Harrington of Helena, Ark.; loss \$1000.

Mo., Joplin.—Patrick W. Hennessy's residence at 728 Chestnut St.; loss on building, \$8000.

Okla., Oktaha.—City school; loss \$8000. Address The Mayor.

S. C., Aiken.—Cotton gin owned by Sullivan Johnson of Talatah, S. C.

Tenn., Chattanooga.—Nashville, Chattanooga & St. Louis Railway's union station shed partially destroyed; loss estimated at \$23,000; H. McDonald, chief engineer, Nashville, Tenn.

Tenn., Johnson City.—Braswell Dry Goods Co.'s store, building owned by John M. Braswell of Greeneville, Tenn.; loss \$10,000 to \$15,000.

Tex., Avalon.—J. M. Powell & Son's cotton gin; loss \$15,000.

Tex., Beaumont.—International Creosoting Co.'s plant damaged; loss \$25,000.

Tex., Brownwood.—Brownwood Steam Laundry building, owned by Edward Selvidge; loss \$3000.

Tex., Denton.—College of Industrial Arts Annex No. 3 destroyed, Annex No. 2 damaged; loss \$10,000.

Tex., Enterprise.—J. D. White's store; loss on building and fixtures, \$4500.

Tex., El Paso.—Grebe Cleaning and Dyeing Works at 418 N. Oregon St.; building owned by Mrs. Elvira Almsa.

Tex., Longview.—Residences at Longview Junction, owned by Mrs. Leon Hart, H. H. Sims, H. M. Dickford and E. S. Terry; loss \$10,600 to \$20,000.

Tex., Lovelady.—Geo. F. McCullough's cotton gin.

Tex., Tulla.—Tulla Standard's printery and office; loss \$10,000.

Tex., Winfield.—Public school building; loss \$4000. Address The Mayor.

Va., Arlington.—Bewing Co.'s stables and bottling works; estimated loss, \$20,000.

Va., Chatham.—Fitzgerald Bldg., occupied by L. C. Womack, D. S. White & Sons and others; total loss \$17,925.

Va., Chatham.—O. E. Thompson's building; loss \$6000.

Va., Chesterfield.—Theodore Hapke's residence; loss \$16,000.

Va., Fincastle.—Reedman & Co.'s store, loss \$4000; W. R. Hite's store, loss \$3000; Carper Bros.' store, loss \$3000; Samuel Crush's store, loss \$2500; Town Hall, loss \$4000.

Va., Holland.—John T. Cutchin's peanut warehouse; loss about \$5000.

Va., Portsmouth.—Portsmouth Tallow Co.'s plant; loss \$2500.

W. Va., Mattewan.—G. R. Buskirk's two stores and dwelling, loss \$20,000; J. H. Phillips' store and dwelling, loss \$2500; G. W. Hatfield's dwelling, loss \$5000; Dr. Golings' two dwellings and hospital, loss \$15,000; R. W. Buskirk's hotel, four stores and dwelling, loss \$30,000.

W. Va., Welch.—McDowell County National Bank (reported burned) was only damaged; loss \$10,000.

W. Va., Welch.—Hudson Bros.' building, loss \$10,000; Hatfield Hotel, owned by J. M. Johnson, loss \$50,000; Payne Bldg., loss \$35,000; Joseph Wheddy's restaurant, loss \$3000; City Meat Market, owned by J. F. Calloway, loss \$2000; Mrs. Sarah Brewster's residence, loss \$7000; Patton Bldg., loss \$20,000; First National Bank Bldg., loss \$20,000; McDowell County National Bank, loss \$20,000; Herman Joseph's store, McDowell Recorder's plant and other buildings, total loss about \$150,000.

W. Va., Wilcox.—Talmage & Scott's store, loss about \$20,000; G. Hyman & Sons' store; Toiz & Foreman's store, loss \$7000; Carlos Drug Co.'s store, loss \$10,000; B. H. Powell's store and warehouse, loss about \$20,000; L. Michaelson's restaurant, loss \$4000.

COLLAPSED

Ala., Mobile.—Building at S. N. Water St. owned by W. L. Truitt; loss, \$25,000.

BUILDING NEWS

BUILDINGS PROPOSED

APARTMENT-HOUSES

Md., Baltimore.—F. H. Cox has plans finished by J. R. Forsythe, 232 St. Paul St., Baltimore, and will receive bids until January 23 for erection of apartment-house at Mont Alto; three-story; frame; hot-water heat; electric lights. Brown & Morgan, 15 E. Fayette St.; Edw. Piert, 222 Perry St.; L. J. Brown, Pimlico Rd. near Belvidere Ave.; H. A. Kelbaugh, 1945 Harlem Ave., and J. T. Mathis, 3836 Park Heights Ave., all of Baltimore, are estimating. (Recently mentioned.)

Md., Baltimore.—Geo. R. Morris, Gunther Bldg., will erect apartment-house at Madison Ave. and Wilson St.; five stories; red pressed brick; terra-cotta trimmings; vacuum cleaning plant; electric lights; hot-water heat; fireproof construction; site 50x130 feet; cost \$75,000; plans and construction by owner.

Md., Baltimore.—Wentworth Apartment Co., J. G. Vallant, president, 224 N. Charles St., is taking sub-bids for construction and material for five-story apartment building at University Parkway and Wyman Park; red brick and terra-cotta; slate roof; steam heat; gas and electric lights; cost \$100,000; plans by Gilden & Friz, Glen Bldg., Baltimore. (Recently noted.)

Md., Baltimore.—F. Bechtel, Garrison and Belle Aves., has revised plans by and will receive bids through H. J. Tinley, 314 N. Charles St., Baltimore, for apartment-house at Garrison and Belle Aves.; brick; three stories; 32x75 feet; steam heat; electric lights; cost \$15,000. (Recently mentioned.)

Md., Baltimore.—H. J. Tinley, 314 N. Charles St., Baltimore, has plans and will receive bids for apartment-house at Roslyn and Bate-man Aves.; three stories; brick; 40x80 feet; steam heat; electric lights; cost \$15,000.

Tenn., Memphis.—Elmer Harris purchased site at Madison and Bellevue Aves. for clients who will erect apartment-house; 30 four and five room apartments; cost \$75,000; awarded contract for excavating and reinforced concrete to Miller Paving Co., Memphis.

Tenn., Memphis.—H. R. Hurt and associates are reported to erect apartment-house on Madison Ave. near Bellevue Blvd.; cost \$75,000.

Tex., Fort Worth.—J. B. Gray will erect apartment-house; brick; construction begun; cost \$12,000.

ASSOCIATION AND FRATERNAL

Ark., Little Rock.—Benevolent Protective Order of Elks will erect lodge building; probably two stories and basement; cost \$30,000. (Recently noted.)

Ga., Athens.—Young Women's Christian Association plans erection of \$40,000 building.

S. C., Sumter.—Young Men's Christian Association, L. D. Jennings, chairman building committee, will open bids January 31 for erection of association building; 67x101 feet; ordinary construction; direct steam heat;

cost \$25,000; plans by Wilson & Sompayrac, Columbia, S. C.

Tex., Dallas.—Sons of Hermann have plans by William Martens, Dallas, for building.

Tex., Port Arthur.—Ancient Free and Accepted Masons will erect temple; four stories; 50x100 feet.

Va., Petersburg.—Petersburg Benevolent Mechanic Association, Wm. H. Baxter, secretary-treasurer, plans erection of business and office building; seven stories; fireproof; cost \$125,000.

Va., Roanoke.—Lakeland Lodge No. 190, Henry Dunnington, secretary, Ancient Free and Accepted Masons, will expend about \$45,000 to erect lodge building; four stories; plans not determined. (Previously noted.)

BANK AND OFFICE

Ala., Attalla.—Bank of Attalla will rebuild bank building recently reported burned at loss of about \$5000.

Ala., Birmingham.—American Trust and Savings Bank will erect office building; 17 stories; 50x125 feet; character of construction not determined; cost not less than \$500,000; architect not selected.

Ark., Clinton.—Van Buren County Bank, Garner Fraser, president, will erect bank building.

Ala., Oxford.—Oxford National Bank will erect bank building.

Ga., Gainesville.—John W. W. Simmons is considering erection of office building.

Ga., Savannah.—Safety Investment Co. (holding company for Real Estate Bank) will duplicate its bank building at Congress and Drayton Sts.; four stories; three upper floors will be divided into 24 offices and ground floor will be arranged for poolroom and amusement parlor; cost \$30,000; new structure will adjoin bank building and be connected as twin building, with one entrance and one elevator; new elevator will be installed.

La., Oil City.—Continental Bank & Trust Co., L. E. Thomas, president, has plans by E. F. Nield (address care of company) for bank building; 25x42 feet; ordinary brick construction; cost \$2700; bids opened about January 17.

Mo., Joplin.—St. Louis & San Francisco R. R., F. G. Jonah, chief engineer, St. Louis, Mo., will erect office building and depot. (See "Railway Stations.")

N. C., Edenton.—Bank of Edenton will erect bank building.

Tenn., Knoxville.—Union Bank will remodel three-story brick building at 300 S. Gay St. for bank and office purposes; front will probably be of pressed brick or stone; cost about \$16,000; plans will be prepared by Hudson Bros., New York.

Tex., Abilene.—Pacific Express Co., H. C. Cooper, route agent, Fort Worth, Tex., will erect express office; brick; 40x60 feet; plans prepared and submitted to bidders.

Tex., Brownsville.—St. Louis, Brownsville

& Mexico Railway, E. C. Burgess, engineer maintenance of way, Kingsville, Tex., will, it is reported, erect two-story brick office building.

Tex., Garland.—Banking company organized with Jesse Tucker, president; purchased Knights of Pythias Bldg., 30x50 feet; will remodel and install vault.

Va., Portsmouth.—Bank of Portsmouth contemplates erecting bank building.

CHURCHES

Ala., Brewton.—First Baptist Church, Rev. Walter M. Murray, pastor, has plans by Geo. B. Rodgers, Mobile, Ala., for rebuilding edifice recently reported burned; 65x100 feet; heating not decided; cost \$15,000; open bids about March 1.

Ala., Mobile.—St. Peter's Catholic Church accepted plans for edifice. Rev. Father Dunne will supervise construction.

Ala., Cullman.—First Baptist Church, Rev. M. L. Harris, pastor, will erect edifice to cost \$12,000 to \$15,000.

La., Baton Rouge.—First Baptist Church, Rev. Robert Lee Baker, pastor, has not determined upon plans for 58x90-foot edifice; hot-air heat; electric lighting; cement sidewalks; cost \$30,000. (Recently noted.)

N. C., Charlotte.—East Ave. Tabernacle Associated Reformed Church, Rev. J. G. Kennedy, pastor, has not selected architect to prepare plans for \$25,000 edifice and Sunday school room; will cover 6500 square feet of floor space; brick with stone trimmings and foundation; probably hot-water heat; cost of concrete sidewalks, \$300. (Recently noted.)

Okla., Tulsa.—Lutheran Church, Rev. C. W. Sliferd, pastor, contemplates erecting edifice.

S. C., Charleston.—Cumberland Methodist Church, Rev. J. T. Peeler, pastor, contemplates erecting edifice to cost \$10,000 to \$12,000.

Tenn., Glendale.—Presbyterian Church, U. S. A., Rev. J. M. Robinson, pastor, Culleoka, Tenn., contemplates erecting church building and manse.

Tex., Ennis.—Free Methodist congregation will erect concrete edifice. Address The Pastor, Free Methodist Church.

Tex., Hillsboro.—First Presbyterian congregation will erect edifice. Address The Pastor, First Presbyterian Church.

Tex., Port Bolivar.—Methodist Church will erect edifice; bids will be received until noon February 1; plans and specifications on file with Rev. Gus Garrison at parsonage, who will furnish necessary information. Address all communications to O. W. Johnson, chairman of building committee.

Va., Fredericksburg.—Baptist congregation will erect addition to edifice. Address The Pastor, Baptist Church.

Va., Ocean View.—Rev. William P. Wright is promoting erection of Methodist Church building to cost about \$3000.

Va., Richmond.—Stockton Street Baptist Church, Rev. James T. Haley, pastor, has not selected architect to prepare plans for edifice recently noted; brick and wood; probably steam heat; electric lighting; cost \$5000.

W. Va., Annabelle.—Four States Coal & Coke Co. will build church; brick construction; cost \$7000; general offices in Frick Bldg., Pittsburg, Pa.

W. Va., Martinsburg.—United Brethren congregation will erect edifice to cost \$15,000; 52x85 feet with annex 25x45 feet; ordinary construction; heating and lighting not decided; plans by Mack & Kountz, Hagerstown, Md.; will probably open bids in April. Address W. F. Gruver, Martinsburg.

CITY AND COUNTY

Ga., Augusta.—Stockade.—Nisbet Wingfield, Commissioner of Public Works, will receive bids until January 31 for erection of stockade; deposit of \$250. (Previously noted.)

Md., Cumberland.—City rejected all bids for erection of city hall; two stories and basement; 88x90 feet; fireproof construction; steam heat; electric lighting; prism lights; cost \$100,000; plans by Holmboe & Lafferty, Clarksburg, W. Va. (Recently noted.)

Mo., Chaffee.—City Hall.—City has plans by Lindsay Architectural Co., St. Louis, Mo., for city hall; brick; cost \$6000. (Recently noted to issue \$26,000 worth of bonds for city hall and water-works.)

Mo., Kansas City.—Board of Public Works approved plans by Fred C. Gunn, 709 Postals' Bank Bldg., Kansas City, for hospital for contagious diseases; two stories and basement; 280,000 cubic feet floor space; \$75,000 bond issue voted.

Okla., Mangum.—City Hall and Fire Station.—City will expend \$20,000 to erect city

hall and fire station; 40x100 feet; steam heating; electric lighting; plans by Glenn Bros., Wichita Falls, Tex.; bids opened January 12; heating and plumbing contracts let separately. (Recently noted. See "Machinery Wanted.")

Okla., Muskogee.—Library.—Library Board, Irwin Donovan, president, has not decided upon location of site for erection of \$55,000 Carnegie library; architect not employed. (Recently noted to vote on \$20,000 bond issue.)

Tex., Fort Worth.—Municipal Buildings. City voted following bond issues: \$95,000 for firehalls and equipment; \$35,000 for police stations; \$20,000 for city hospital; \$15,000 for city storehouse and stables. Address The Mayor. (Recently noted.)

Tex., San Antonio.—Jail.—Bexar County Commissioners opened bids for remodeling jail; Henry D. Rheimer & Bro., San Antonio, lowest bidders on general contract at \$44,925; plans by Henry T. Phelps, 706-17 Gunther Bldg., San Antonio, call for increase of capacity, construction of mission front, raising cells and improvements to ventilating system.

Va., Norfolk.—Police Headquarters.—Board of Control opened bids for erection of police headquarters and court; R. H. Richardson & Son, Hampton, Va., are lowest bidders at \$44,273; plans by J. Keenan Peebles, Norfolk. (Recently noted.)

Va., Nottoway.—Jail.—Nottoway County Commissioners, J. B. Tuggle, member of committee, invites bids for erection of county jail; E. S. Deane, County Clerk.

COURTHOUSES

Ga., Griffin.—Bids addressed to H. V. Kell, Commissioner, will be received at office of Commissioners of Roads and Revenues of Spaulding County until 12 noon February 7 for material and erection of courthouse; estimated cost, \$80,000; proposals to be endorsed "Proposals for New County Courthouse" and submitted on special blanks furnished by architect; certified check for 2 per cent. amount of bid, payable to said Commissioners; plans, specifications, etc., at office of A. Ten Eyck Brown, 606-10 Forsyth Bldg., Atlanta, Ga., and of W. E. H. Searcy, clerk of Commissioners, Masonic Temple, Griffin. (Previously noted.)

Tex., Shafter Lake.—Andrews county voted \$5000 bond issue to erect courthouse. Address County Commissioners.

DWELLINGS

Ala., Gadsden.—Interurban Land Co. is reported as planning erection of number of dwellings.

Ala., Fairhope.—D. H. Stewart of Pittsburg, Pa., will erect bungalow; asbestos sheet construction; cost \$3000.

Ala., Montgomery.—Susan V. Poulnot will erect two-story double frame dwelling; cost \$7200.

Ga., Atlanta.—N. C. McPherson will erect residence; cost \$3000.

Ga., Atlanta.—Dillon-Morris Company will expend \$2500 for erection of dwelling.

Ga., Blue Ridge.—J. F. Holden contemplates erection of residence.

Ga., Blue Ridge.—Lon Cook will erect residence.

Ga., Blue Ridge.—Kinsey McKinney will probably erect residence.

Ga., Columbus.—Columbus Roberts will erect residence; two stories; 8 or 10 rooms.

Ga., Savannah.—H. H. Lattimore will erect residence; two stories; frame and stucco.

Ky., Louisville.—W. M. Atchison will erect two-and-a-half-story brick residence; cost \$10,000.

Ky., Stearns.—Stearns Coal & Lumber Co. contemplates erection of houses for workmen.

Ky., Whitesburg.—Joe Renfro will rebuild dwelling at Tacoma reported burned; loss, \$5000.

La., New Orleans.—F. W. Lambert will erect frame addition to residence; cost, \$2500.

La., New Orleans.—Parish of Our Lady of Lourdes will erect presbytery at Napoleon Ave. and Freret St. Address The Pastor of Our Lady of Lourdes Church.

La., New Orleans.—George Koppel will expend \$9500 to erect double residence recently noted; 25x72 feet; frame; plans and construction by owner.

Md., Baltimore.—Mrs. W. H. E. Fory has plans revised by Emory & Nussner, 415 Professional Bldg., Baltimore, for dwelling at Grey Rock, Md. (not a postoffice); frame and stucco; three stories; cost, \$5000. (Previously mentioned.)

Md., Baltimore.—Augustus Hampson, 207

St. Paul St., purchased site 165x200 feet on Huntington Ave. near 30th St., and will erect number of dwellings.

Md., Baltimore.—John F. Carter, Westwood and Braddish Aves., has plans by Jacob F. Gerwig, 210 E. Lexington St., Baltimore, for dwelling on Park Heights Ave.; frame; two and a half stories; tin roof; steam heat; electric and gas lights; cost \$5000.

Md., Baltimore.—Frank Novak, 2808 Jefferson St., has plans by J. F. Hurt, 2808 Jefferson St., Baltimore, for 30 dwellings on Rose St., near Jefferson St.; two stories; brick.

Md., Baltimore.—John T. Miller, 2921 N. Charles St., has plans by J. R. Forsythe, 232 St. Paul St., Baltimore, for seven dwellings on 29th St.; three stories; brick with marble trimmings; slag roof; steam heat; gas and electric lights; owner will construct.

Md., Baltimore.—Edward J. Storck, 86 Gunther Bldg., has plans by Harry E. Storck, Baltimore, for eight dwellings on Fairmount Ave. near Ellwood Ave.; brick; hot-air heat; Carey cement roofing; cost \$11,000.

Md., Mt. Washington.—Hill Top Park Co., Harry Webb, president, Maryland Telephone Bldg., Baltimore, will erect four bungalows; cost \$25,000 to \$30,000. (See "Land Developments.")

Md., Roland Park.—Roland Park Co., 408 Roland Ave., has plans by E. L. Palmer, Jr., 308 Roland Ave., for two dwellings on plat No. 6; brick; two and a half stories; cost \$32,000.

Md., Ruxton.—John E. Deford has plans by Elliott & Emmart, Union Trust Bldg., Baltimore, Md., for dwelling and stable; bids received January 14; G. Walter Tovell, Eutaw and Dolphin Sts., Baltimore, Md., is estimating.

Miss., Meridian.—A. R. Johnson will erect residence to replace burned structure; two stories; 10 rooms; hot-water heat; cost \$7000.

Miss., Natchez.—Natchez Packing Co. will erect boarding-house for employees.

Mo., St. Louis.—Louise N. Pierce will erect two-and-a-half-story dwelling to cost \$15,990 and one-story garage to cost \$1000.

Mo., Kansas City.—J. E. Baird will erect residence; stone veneer; cost \$6000.

N. C., Charlotte.—S. J. Ashbury will erect double residence; six rooms on each side.

N. C., Greensboro.—C. C. Collins will erect bungalow.

Okla., Oklahoma City.—W. H. Miller will erect two-story frame dwelling; cost \$3000.

Tenn., Glendale.—Presbyterian Church, U. S. A., will erect manse. (See "Churches.")

Tenn., Knoxville.—Frank Preston awarded contract to A. R. Ogle, Knoxville, to erect residence; two stories; cost \$3500.

Tenn., Nashville.—W. D. Trabue will open bids at once for erection of 12-room dwelling recently noted; brick or brick veneer; hot-air furnace; electric lighting; plans by C. K. Colley, Nashville.

Tenn., Nashville.—P. J. Kane will erect residence; two stories; brick; cost \$5000.

Tex., Dallas.—C. L. Keightley will rebuild dwelling recently reported burned.

Tex., Houston.—H. Margolin will erect residence.

Tex., Port Lavaca.—Rev. Shepherd will erect eight-room residence.

Tex., Port Lavaca.—W. Nelson will erect five-room residence.

Tex., Port Lavaca.—Jacob Garner will erect two five-room residences.

Va., Richmond.—S. G. Meredith will erect two-story brick tenement-house (three dwellings); cost, \$4000.

Tex., Victoria.—Edwin Goldman is having plans prepared by Hull & Praeger, Victoria, for \$3500 residence.

Tex., Victoria.—A. E. Hull is having plans prepared by Hull & Praeger, Victoria, for residence; cost \$3500.

Va., Norfolk.—Z. B. Clapps will erect several dwellings recently noted; 28x42 feet; brick; cost \$2000; plans and construction by owner.

Va., Chesterfield.—Theodore Hapke will, it is reported, rebuild residence reported burned; loss \$10,000.

Va., Richmond.—Mrs. M. A. B. Smith will erect two-story brick dwelling; cost \$3450.

Va., Richmond.—J. W. Browning will erect two-story brick dwelling; cost \$3100.

Va., Richmond.—J. W. Browning will erect two-story brick dwelling; cost \$3100.

Va., Urbanna.—Methodist Church has plans by Muir & Chandlee, Urbanna, for parsonage; 32x32 feet; frame; hot-water heat; cost \$1500; bids opened. (Recently noted.)

W. Va., Weston.—N. D. Goe, Postoffice Bldg., will receive bids until February 1 for erection of residence.

GOVERNMENT AND STATE

D. C., Washington.—Bureau of Engraving and Printing.—Woodbury & Leighton Co. is lowest bidder at \$1,703,457 for erection of building for Bureau of Engraving and Printing; James Knox Taylor, supervising architect, Treasury Department, Washington, D. C. (Recently mentioned.)

Ga., Fort Screven.—Fire Station.—Bids will be received until 11.45 A. M. February 6 for construction, including plumbing, electric wiring and fixtures, of fire station; information furnished on application; deposit of \$15 required on each set of plans and specifications loaned. Address Constructing Quartermaster, Fort Screven.

Ga., Waycross.—Postoffice.—A. B. Stannard of New York is lowest bidder at \$56,000 to erect U. S. postoffice; James Knox Taylor, supervising architect, Treasury Department, Washington, D. C. (Recently mentioned.)

Miss., Jackson.—Hospital.—Trustees State Charity Hospital, J. J. Coman, secretary, adopted plans by Whildin & Price, Birmingham, Ala., for hospital buildings; three stories; brick and limestone; 168x160 feet; cost, about \$70,000; equipment will increase cost to about \$100,000. Theo. C. Link, St. Louis, Mo., is consulting engineer. Dr. S. H. McLean is superintendent. (Previously mentioned.)

Va., Marion.—Hospital.—Southwestern State Hospital will erect addition to hospital to accommodate about 150 patients; construction begun.

HOTELS

Ala., Cullman.—Asa B. Fuller will remodel several buildings at Second Ave., West and 3d Sts. for hotel.

Ark., Stuttgart.—H. S. Albright of Kewanee, Ill., is promoting erection of \$75,000 hotel.

Ark., Texarkana.—Fred W. Offenhausser purchased site and plans erection of fireproof hotel; six or seven stories.

D. C., Washington.—Arlington Hotel Co. is being organized by Washington and New York capitalists; having plans prepared by Francis M. Andrews, Waldorf-Astoria Hotel, New York, for hotel to replace Arlington Hotel, at Vermont Ave. and H St. N. W.; eight stories; at least 700 guestrooms; courtyard in center covered with glass roof; cost of building, exclusive of furnishings and grounds, \$3,000,000.

Fla., Bartow.—Oaks Hotel Co. incorporated with \$50,000 capital stock; E. C. Stuart, president; T. L. Wilson, vice-president; J. W. Sample, secretary-treasurer.

Ga., Atlanta.—Chalybeate Springs Co. incorporated with \$250,000 capital stock by Frank J. Cohen, Joseph Cohen and others; will erect hotel and bottle water from Chalybeate spring.

Ga., Macon.—C. B. Willingham will erect hotel; 60 rooms with private baths; three stories; first floor for stores; upper floors for hotel.

Ga., Macon.—Walter Dannenberg will erect store and hotel building; two stories; brick; lower floor to contain 10 storerooms, upper floor 40 rooms for hotel; cost \$30,000 to \$40,000; plans by F. R. Happ, Macon.

Mo., St. Louis.—James C. Jones will not erect three-story fireproof hotel building recently reported.

N. C., Asheville.—Gay Green and John Lange are having plans prepared by Smith & Carrier, Asheville, for completion of concrete hotel; brick or concrete partition; cost \$100,000. (Recently noted.)

N. C., Asheville.—Lange & Green have plans by R. S. Smith, Asheville, for repairing and addition to hotel previously noted; six stories; fireproof construction; steam heat; electric lighting; vault lights; two passenger and one freight elevator; cost \$200,000; plans soon ready for bids. Address architect.

N. C., Waynesville.—Southern Assembly, James Atkin, president, plans erection of large hotel and two smaller ones. (See "Land Developments.")

N. C., Wilmington.—P. O. Stone, Jos. H. Hinton, Thos. H. Wright and Robt. R. Stone purchased Tarrymore Hotel at Wrightsville Beach and will improve; construct covered walk lighted with electricity, remodel lobby, install arch doors, construct cement bath pool, etc.

Tenn., Chattanooga.—New Inn Co., recently noted to be incorporated with \$200,000 capital stock by C. A. Lyerly and others, plans erection of hotel on Lookout Mountain. M. S. Gibson, Chattanooga, may be addressed for further information.

Tex., Corpus Christie.—J. L. Donigan of Galveston, Tex., proprietor of State Hotel, will erect addition; five stories; cost, \$50,000.

Tex., Goodnight.—Goodnight American Buf-

falo Ranch Co., Charles Goodnight, president, contemplates erection of hotel. (See "Miscellaneous Enterprises.")

Tex., Beeville.—Gunter Hotel Co., San Antonio, Tex., will not erect hotel. (Recent report an error.)

Tex., Rockport.—W. B. MacSherry, Washington, D. C., and others will expend \$300,000 to erect hotel recently noted; 180x140 feet, with two pavilions 60x100 feet each; fireproof construction; vacuum steam heat; electric lighting; plans by H. A. Reuter, Frost Bldg., San Antonio, Tex.

Tex., Waco.—W. R. Orman will erect hotel and store building; two stories; brick; 165x59 feet; lower floor stores; upper floor hotel.

Va., Harrisonburg.—Massanetta Springs Co., G. G. Grattan, president, previously reported organized with \$50,000 capital stock, will erect \$15,000 hotel; part will be three stories, 38x73 feet; part two stories, 36x36 feet; ordinary construction; electric lighting; plans and construction by J. S. Heatwole Company, Harrisonburg; materials purchased.

W. Va., Annabelle.—Four States Coal & Coke Co. plans erecting hotel; brick construction; 75 rooms; general offices in Frick Bldg., Pittsburgh, Pa.

W. Va., Logan.—Jefferson Hotel Co. incorporated with \$50,000 capital stock by J. B. Wilkinson, J. Cary Alderson, S. B. Robertson and others.

MISCELLANEOUS

Ala., Birmingham.—Clubhouse.—University Club, W. J. Coniff, president, will purchase residence for \$50,000 and erect addition at cost of \$25,000.

Ala., Selma.—Hospital.—Board of trustees have formulated plans for Vaughan Memorial Hospital; will remodel old courthouse; furnace of heating plant will be separate from main hospital building.

Ky., Louisville.—Hospital.—St. John's Hospital Association, Dr. E. L. Powell, president, will be incorporated to erect hospital costing about \$300,000.

La., New Orleans.—Clubhouse.—Young Men's Gymnastic Club will remodel bowling alley and add two new bowling alleys at cost of about \$5000; contemplates expenditure of \$125,000 for various improvements, to include new front of white enameled terra-cotta; building will be four stories and basement; ground floor will contain library, grill room, etc., and will be finished principally in marble and tile; banquet hall on third floor; fourth floor will be exclusively devoted to bachelor apartments for club members; each room to contain private bath; tank room, including baths, will be renovated; ceiling in gymnasium will be supported by steel beams; bar and grill room will be improved and enlarged, and will be practically of marble and stained glass; plans by Toledano & Wogan of New Orleans.

La., Shreveport.—Grandstand.—State Fair Association will erect steel grandstand to cost \$25,000.

Md., Baltimore.—Hospital.—Johns Hopkins Hospital asks for bids on Phipps Psychiatric Clinic building through Pittsburg Construction Co. for interior construction, labor, supervision, foundations, steel work, etc.; B. F. Bennett Building Co., 123 S. Howard St.; M. C. Davis, 15 E. Fayette St., and W. E. Burnham, Law Bldg., all of Baltimore, are estimating.

Md., Baltimore.—Restaurant.—Charles Schneider, 117 W. Fayette St., is having plans prepared by Haskell & Barnes, 407 Wilson Bldg., Baltimore, for enlargement of restaurant at 117 W. Fayette St.; cost about \$6000.

N. C., Winston-Salem.—Home.—Methodist Church will have plans prepared by Hook & Rogers, Charlotte, N. C., for Children's Home.

Tenn., Bristol.—Hospital.—King's Mountain Memorial Hospital Association will erect hospital to cost \$25,000; new hospital will absorb St. Luke's Hospital.

Tenn., Memphis.—Clubhouse.—Memphis Country Club is having plans prepared by Shaw & Pfall, 1703 Tennessee Trust Bldg., Memphis, for clubhouse; fireproof construction; hot-water heat; electric lighting; cost \$75,000; date of opening bids not set.

Tenn., Nashville.—Orphans' Home.—Baptist Orphans' Home, C. T. Cheek, president, will remove orphanage from West Nashville to location 12 miles from city; site comprises 74 acres.

Tex., Houston.—Sanitarium.—Vital Remedies Co. incorporated with \$125,000 capital stock by George L. Glass, Charles A. Culter and Joseph H. Eagle; contemplates erecting sanitarium. (See "Mining.")

Tex., San Antonio.—Clubhouse.—San Anto-

ulo Club will erect clubhouse; proposes three-story structure with roof garden, basement and galleries; basement to contain two swimming pools and heating and lighting plants; will drill artesian well.

Va., Richmond.—George J. Stoneman, R. F. D. No. 5, Richmond, will rebuild barn recently burned; two stories; 35x60 feet; brick. (See "Machinery Wanted.")

W. Va., Annabelle.—Amusement Hall.—Four States Coal & Coke Co. will build amusement hall; brick construction; three stories; to contain billiard-rooms, bowling alleys, skating rink, auditorium with stage, etc.; cost \$50,000; general offices in Frick Bldg., Pittsburgh, Pa.

RAILWAY STATIONS

Mo., Joplin.—St. Louis & San Francisco R. R., F. G. Jonah, chief engineer construction, St. Louis, Mo., secured 99-year lease on site 100x120 feet, and will erect passenger depot and office building; eight or nine stories and basement; structural steel and concrete, finished with white enameled brick; fireproof; basement and first floors will be used by railway, and remainder will be devoted to commercial offices of various kinds; umbrella sheds will be built to extend 300 feet from station; additional trackage will be laid to be on level with basement of depot; cost estimated at \$250,000, exclusive of train sheds. (Recently mentioned.)

Tenn., Chattanooga.—Nashville, Chattanooga & St. Louis Railway will rebuild portion of union station shed reported burned at loss of \$23,000; H. McDonald, Nashville, Tenn., is chief engineer.

Tex., Terrell.—Texas & Pacific Railway Co., P. S. Wathen, chief engineer, Dallas, Tex., has not completed plans for rebuilding depot recently reported burned.

Va., Altavista.—Southern Railway, D. W. Lum, chief engineer, Washington, D. C., will erect depot; electric lighting; cost about \$500; construction begun.

SCHOOLS

Ala., Florence.—M. C. Wilson, president, may be addressed relative to plans for dormitory and other improvements to Florence State Normal School. (Recently noted to vote February 7 on issuance of \$15,000 worth of bonds.)

Ga., Fort Valley.—City will probably vote on \$30,000 bond issue to erect school. Address The Mayor.

Ga., Glennville.—City proposes voting on bond issue to erect school to replace structure recently burned. Address The Mayor.

Ga., Savannah.—Society for African Missions will erect two-story brick school.

La., Houma.—Fifth Ward of Terrebonne Parish voted tax to purchase site and erect agricultural school; J. M. Foote, parish superintendent, Houma.

La., Natchitoches.—Superintendent A. E. Bath is planning special tax for erection of brick school.

La., Pineville.—Committee on Education, Louisiana Baptist Convention, C. Cottingham, president, will rebuild school building recently reported burned; three stories; 140x47 feet; heating and lighting not decided; cost \$30,000; architect not selected.

Md., Baltimore County.—School Commissioners of Baltimore County, Towson, Md., have plans finished by Thos. L. Jones & Son, 410 W. Saratoga St., Baltimore, Md., and will receive bids until January 23 for construction of school building on Philco Rd.; W. E. Burnham, Law Bldg., and John Cowan, Inc., 106 W. Madison St., both of Baltimore, are estimating. (Previously mentioned.)

Miss., Cleveland.—Bolivar Agricultural High School Trustees plan erection of academic and two dormitory buildings; latter each with capacity of 50 pupils; French renaissance; red pressed brick; artificial stone trimmings; heating plant in academic building; plans by Wm. Drago, New Orleans, La.; only academic building to be erected this year.

Miss., Mendenhall.—Mayor and Board of Aldermen will receive bids February 7 for erection of brick school building; two stories; 70x90 feet; heaters; cost \$8000; plans by M. M. Alsop, Itta Bena, Miss.; certified check for \$250 required; plans and specifications on file in office of H. A. Geiger, Mayor; usual rights reserved; T. F. Cross, clerk.

Mo., Kansas City.—Board of Education plans erection of addition to Manual Training High School building to accommodate over 1000 additional pupils.

N. C., Charlotte.—Stonewall Jackson Manual Training School has plans by Louis H. Asbury, Charlotte, for proposed Bill Nye memorial (administration) building; cost \$15,000.

N. C., Durham.—Durham County Board of Education decided on plans for school in West Durham; eight recitation-rooms, assembly hall, library and office; cost \$15,000. (Recently noted.)

N. C., Greensboro.—Greensboro Female College has plans by Hook & Rogers, Charlotte, for dormitory; 36 sleeping rooms; cost \$25,000. (Previously noted.)

Okl., Butler.—Butler Christian College, Rev. George Lay Wolfe, president, recently reported incorporated with \$100,000 capital stock, will erect fireproof college building; cost \$25,000; size of structure and other plans not determined.

S. C., Anderson.—Board of Trustees State Baptist Convention, Rev. Louis Bristow, secretary, Abbeville, S. C., will erect Baptist college for women; architects are invited to submit plans and specifications January 23 for administration building; amount available \$75,000; other buildings to be erected later.

Tex., Beeville.—Beeville Independent School District has plans by Mr. Phelps of Austin, Tex., for proposed Allen Carter Jones High School building; cost \$30,000.

Tex., Burkburnett.—W. W. Graham, secretary of School Board, will receive bids until 3 P. M. January 24 for erection of school building; stone, brick and concrete; cost \$13,000; plans and specifications on file in this office or in office of Hull & Spear, architects, 912½ Main St., Fort Worth, Tex., or may be secured from either place by depositing \$25; certified check for \$250 must accompany each bid; heating will be let separately. (See "Machinery Wanted.")

Tex., Commerce.—East Texas Normal College will rebuild three dormitories recently reported burned; loss \$50,000.

Tex., Nederland.—Nederland School District will vote February 4 on \$20,000 bond issue to purchase site and erect brick school. Address District School Trustees.

Tex., Terrell.—Wesley College will erect \$50,000 administration building. For further information address Rev. W. B. Wilson.

Tex., Ysleta.—Ysleta School District trustees plan issuance of \$18,000 bond issue to erect school.

Va., Abingdon.—Martha Washington College has plans for Maria Cooper Hall; 50x100 feet; four stories; cost \$37,500. (Recently erroneously reported at Bluefield, W. Va.)

Va., Harrisonburg.—School Board has plans by C. M. Robinson, Richmond, Va., for \$15,000 Waterman graded school building and for addition to school for negroes.

Va., Danville.—Finance committee will recommend to Common Council appropriation of \$30,000 to erect school building.

Va., Roanoke.—Roanoke School District Trustees plan to issue \$7000 worth of bonds to erect school.

STORES

Ark., Hamburg.—U. J. Cone will erect store and office building; brick construction.

D. C., Washington.—A. Lsner, proprietor Palais Royal, 11th and G Sts. N. W., has not selected architect to prepare plans for addition to store building recently noted; to cover 437,000 cubic feet of floor space; fireproof construction; exhaust steam heat; electric lighting; plunger elevator; cost \$150,000.

Fla., Fort Meade.—W. J. Durrance is ready to receive bids on rebuilding of store and hotel recently reported burned; 121x90 feet; brick; electric lighting; cost \$10,000.

Fla., Jacksonville.—Jacksonville Gas Co. will, it is reported, erect business building on site of old plant after it is demolished.

Fla., St. Augustine.—C. M. Millburn is reported as contemplating erection of business building.

Ga., Macon.—Walter Dannenburg will erect store and hotel building. (See "Hotels.")

Ga., Rome.—Wright Willingham awarded contract to Coleman Bryan, Rome, to erect four store buildings; one story; pressed brick; plate-glass front; cost \$5000.

Md., Baltimore.—Baltimore Bargain House, Jacob Epstein, proprietor, 204-220 West Baltimore St., is receiving new estimates for construction of store at Baltimore and Liberty Sts.; 12 stories; cost \$1,500,000 to \$2,000,000; plans by Joseph Evans Sperry, Calvert Bldg., Baltimore. (Recently mentioned.)

Miss., Gulfport.—Harry Hoyle will erect brick business building.

Mo., Kansas City.—H. J. Brunner Metal & Machinery Supply Co. will rebuild structure at 531 Delaware St., recently reported burned; loss in building \$30,000.

Tex., Bastrop.—Pearcy & Booth will erect brick business building and additional story to present structure.

Tex., Bastrop.—W. B. Ransome will erect number of dwellings.

Tex., McKinney.—Dr. Metz will erect addition to business building.

Tex., Port Lavaca.—Willett Wilson will erect two-story brick business building.

Tex., Port Lavaca.—A. Louwein will erect two-story brick business building.

Tex., Port Lavaca.—Dalphi Roemer will erect two-story brick business building.

Tex., Port Lavaca.—Joseph Boyd will erect business building; two stories; brick.

Tex., Texas City.—B. A. Baldwin will erect business building; two stories; brick; 125x110 feet; cost \$18,000.

Tex., Texas City.—W. A. Malin of Houston, Tex., will erect business building; two stories; 125x75 feet; cost \$15,000; construction begun.

Tex., Waco.—W. R. Orman will erect store and hotel building.

Va., Norfolk.—M. W. Talbot is having plans prepared by J. K. Peebles, Norfolk, for commercial building; five stories; site 46½x210 feet.

W. Va., Annabelle.—Four States Coal & Coke Co. will erect store building; brick construction; three stories; cost \$40,000; general offices in Frick Bldg., Pittsburgh, Pa.

THEATERS

Ala., Birmingham.—Shubert Theatrical Co., J. J. Shubert, president, New York, will erect theater and office building; six stories; lower floors for theater; three upper floors for offices; 100-foot frontage; cost \$60,000.

Mo., St. Louis.—Frank Talbot will erect theater at 15-17 S. 6th St.; cost \$25,000.

WAREHOUSES

Ga., Griffin.—Lovick Blanton, owner Farmers' Exchange Warehouse, will erect two-story storehouse and warehouse.

Md., Baltimore.—Hub Furniture Co., 701 Pennsylvania Ave., opened bids January 16 for construction of warehouse at 701 Pennsylvania Ave.; brick; galvanized-iron cornice; plate-glass front; hot-water heat; gas and electric lights; plumbing; private plans; John Cowan, 106 W. Madison St.; John H. Kelly, 1208 Riddle St.; J. B. Orem, 106 W.

BUILDING CONTRACTS AWARDED

APARTMENT-HOUSES

Tex., Fort Worth.—Mrs. Lennie McDowell awarded contract for erection of apartment-house; three stories; brick; cost \$10,000; construction begun.

ASSOCIATION AND FRATERNAL

Ga., Brunswick.—Brunswick Lodge No. 691, Benevolent Protective Order of Elks, purchased building and awarded contract to J. O. Swisher of Jacksonville, Ga., for remodeling and enlarging for lodge building; will extend veranda entire width of house and around side about 20 feet; cost of building and improvements, \$155,000; plans by H. W. Witcover, Savannah, Ga.

Ga., Waycross.—Young Men's Christian Association awarded contract to D. J. Rose & Co., Rocky Mount, N. C., for erection of association building; plans by J. F. Leitner, Wilmington, N. C. (Previously noted.)

La., Morgan City.—Doric Lodge, Ancient Free and Accepted Masons, awarded contract to Caldwell Bros., Abbeville, La., for erection of temple; cost \$5000. (Previously noted.)

Md., Cumberland.—Masonic Temple.—Scottish Rite Masons awarded contract to Olin Gerlach, Frostburg, Md., for construction of building; size 54x114 feet; heating, lighting and other details not decided; cost \$50,000; plans by Wright Butler, Cumberland. (Previously noted. See "Machinery Wanted.")

Md., Gaithersburg.—Forest Oak Lodge, Knights of Pythias, awarded contract to Hezekiah Day, Gaithersburg, for erection of lodge building; two stories; brick; cost \$5000. (Recently noted.)

N. C., Greensboro.—Young Men's Christian Association awarded contract to Ange-Caldwell Construction Co. of Winston-Salem for erection of building; three stories and basement; plans by Shattuck & Hussey, Room 907, 153 La Salle St., Chicago, Ill. (Previously noted.)

N. C., Rocky Mount.—Atlantic Coast Line Railway Co., E. B. Pleasants, chief engineer, Wilmington, N. C., awarded contract to D. J. Rose & Co., Rocky Mount, for erection of Young Men's Christian Association building; plans by J. F. Leitner, Wilmington, N. C. (Recently noted.)

Barre St., and M. C. Davis, 15 E. Fayette St., all of Baltimore, submitted estimates.

Md., Baltimore.—A. Schuman & Co., 417 W. Franklin St., is receiving competitive plans for warehouse at 325 W. Pratt St.; four stories; 32x150 feet; brick. (Previously mentioned.)

Md., Baltimore.—Swift & Co., 300 and 414 S. Eutaw St., will erect warehouse at Eutaw and Camden Sts.; six stories; brick and stone; fireproof; framework of structural iron, with steel girders; electric elevators; cost about \$50,000; contractors estimating include Charles L. Stockhausen, Marine Bank Bldg.; B. F. Bennett Building Co., 123 S. Howard St., and J. Henry Miller, 106 Dover St., all of Baltimore.

Mo., Kansas City.—John Deere Plow Co., S. H. Velle, general manager, Moline, Ill., will erect warehouse; 10 stories; reinforced concrete; 350x140 feet; about 500,000 square feet floor space; plans by Leonard Construction Co., Chicago, Ill.

Mo., Kansas City.—J. I. Case Threshing Machine Co., Racine, Wis., will erect warehouse; one story; 200x125 feet; cost \$15,000.

N. C., Salisbury.—Geiser Manufacturing Co., Waynesboro, Pa., will erect branch distributing warehouse; E. R. Overman is local agent.

Tex., Beaumont.—National Biscuit Co. (main offices New York) contemplates, it is reported, erecting two-story brick building and make Beaumont a distributing point.

Tex., Brownsville.—St. Louis, Brownsville & Mexico Railway, E. C. Burgess, engineer maintenance of way, will enlarge freight warehouse.

Tex., Houston.—J. I. Case Threshing Machine Co., Racine, Wis., will not make any additional improvements to Houston plant. (Recent report incorrect.)

Tex., McKinney.—Joseph Burger will erect warehouse.

Va., Arrington.—Nelson County Tobacco Warehouse Co. incorporated with \$100,000 capital stock; Alla A. Ryan, president; Clendin J. Ryan, vice-president, both of New York; Jesse W. Arrington of Arrington, secretary-treasurer.

W. Va., Piedmont.—E. J. Fredlock Manufacturing & Building Co. will erect storage building and barn; 40x80 feet.

BANK AND OFFICE

N. C., Rocky Mount.—Atlantic Coast Line Railway Co., E. B. Pleasants, chief engineer, Wilmington, N. C., awarded contract to D. J. Rose & Co., Rocky Mount, for remodeling depot and office building; plans by J. F. Leitner, Wilmington, N. C. (Recently described.)

Tex., El Campo.—Citizens' State Bank awarded contract to Zuber & Hill, El Campo, for erection of bank building; 30x65 feet; ordinary construction; stone and brick; cost \$8000; plans by Hull & Praeger, Victoria, Tex. (Recently noted.)

CHURCHES

Ga., Columbus.—Congregational Church awarded contract to Dudley Lumber Co. of Columbus to erect edifice costing \$6000.

Okl., Cleveland.—Presbyterian Church awarded contract to J. H. Allen of Cleveland to erect edifice; brick; cost, \$3000.

CITY AND COUNTY

Miss., Lucedale.—Jail.—George County Supervisors awarded contract to F. B. Hull Construction Co., Jackson, Miss., at \$33,596 for construction of courthouse and jail recently noted. (See "Courthouses.")

Tenn., Chattanooga.—Fire Station.—City awarded contract at \$375 to Meers & Dayton, Chattanooga, for repairing No. 2 fire hall.

COURTHOUSES

Ala., Grove Hill.—Clarke county awarded contract at \$8220.65 to Straton Bros. & Ward, Greensboro, Ala., for erection of annex to courthouse; 36x57 feet, with annex 12x14 feet; two stories; fireproof vault; fireplaces; steel sash and frames for vault; rolling shutters; plans by Wm. Kerridge, Thomasville, Ala.

Miss., Lucedale.—George County Supervisors will expend \$33,596 for erection of court-

house and jail; courthouse, 65x75 feet; jail, 31x39 feet; ordinary and mill construction; brick; fireproof vaults; jail will be fireproof; plans by McCrary & Slater, Mobile, Ala.; contract recently noted awarded to F. B. Hull Construction Co., Jackson, Miss.

Tex., Beeville.—Bee County Commissioners awarded contract to W. C. Whitney, Beaumont, Tex., at \$72,050 for erection of courthouse; plans by Stephenson & Heldenfelds, Beeville. (Recently noted.)

DWELLINGS

Ala., Birmingham.—W. S. Brown awarded contract to Evans Bros., Birmingham, for erection of residence; tapestry brick; cost \$24,000; plans by W. C. Weston, Birmingham.

Ala., New Decatur.—J. J. Sullivan awarded contract to J. I. Transue, New Decatur, for erection of residence.

Ky., Lexington.—James Helm awarded contract to Congleton Lumber Co., Lexington, for erection of residence; native gray limestone.

Md., Baltimore.—Waverly Development Co., 422 Law Bldg., awarded contract to W. A. Foreman, 61 Gunther Bldg., Baltimore, for erection of 14 dwellings on Ellerslie Ave., near Mont Pellar Ave.; two-story; 14x44 feet; brick; hot-air heat; slag roof; cost, \$16,800.

Md., Baltimore.—John T. Donohue, 1808 Thames St., has plans by Mason R. Stone, 2238 E. Hoffman St., Baltimore, for 10 dwellings on Eastern Ave.; two stories; brick; hot-air heat; size 14x50 feet; ordinary construction; gas lighting; cost \$1600 each; contract awarded to Mr. Stone. (Recently noted.)

Md., Baltimore.—David Pelzman awarded contract to Morris Swerdlin, 1609 E. Baltimore St., Baltimore, for erection of addition to dwelling; 14x17 feet; steam heat; electric lighting; plans by Callis & Callis, 2000 St. Paul St., Baltimore. (Recently noted under "Stores.")

Md., Baltimore.—J. Schmackler, 220 Essex St., awarded contract to M. Swerdlin, 1609 E. Baltimore St., Baltimore, for erection of two dwellings on Essex St.; three stories; brick; 14x55 feet; cost \$2500; plans by Callis & Callis, 2000 St. Paul St., Baltimore.

Md., Baltimore.—Mont Alto Groves Construction Co. has plans by and awarded contract to D. C. Slonaker, Wallbrook Junction, Station F, Baltimore, for two dwellings on west side of Allendale Rd., near Piedmont Ave.; two and a half stories; frame; 28x31 feet; slate roof; steam heat; cost \$8000.

Md., Mt. Washington.—Richard Gwinn, Dixon Hill, awarded contract to Israel S. Owings, Mt. Washington, for addition to dwelling; two stories; cost, \$6000; plans by Owens & Sisco, Continental Trust Bldg., Baltimore, Md.

N. C., Winston-Salem.—John H. Reich awarded contract to Butler & Miller, Winston-Salem, for erection of dwelling; two stories; seven rooms; frame; electric lighting; cost \$2000.

Okla., Tulsa.—W. D. Abbott awarded contract for erection of residence; 28x34 feet; cost \$3700.

Tex., Bryan.—J. E. Butler awarded contract to W. N. Myerlambers, Bryan, for erection of residence; two stories.

Tex., Bryan.—J. E. Butler awarded contract to M. N. Myerlambers, Bryan, to erect residence; two stories.

Tex., Denton.—C. C. Yancey awarded contract at \$2700 to H. F. Davidson, Denton, for erection of seven-room cottage.

Tex., Huntsville.—Mrs. S. M. Elkins awarded contract to W. H. Randolph, Huntsville, for erection of 18-room dwelling.

Va., Norfolk.—T. W. Hanbury awarded contract to Sawyer Bros., Norfolk, for erection of frame residence; cost \$3300.

Va., Roanoke.—S. W. Daniels awarded contract to J. R. Bates, Roanoke, for erection of proposed dwelling; 36x50 feet; cost \$4000.

Va., Roanoke.—Green Memorial Church awarded contract to Shockey & Field, Roanoke, for parsonage; brick; 10 rooms; cost \$5000.

GOVERNMENT AND STATE

Ky., Ashland.—Postoffice.—Government awarded contract to J. G. Hughes of Ashland to erect United States postoffice.

HOTELS

Miss., Yazoo City.—Miss Ellen Kearney awarded contract to Wm. Morford, Yazoo City, for erection of hotel; two stories; 16 bedrooms; hot-air furnace; electric lights.

MISCELLANEOUS

Fla., Pensacola.—Clubhouse.—Pensacola Yacht and Motor Boat Club, R. B. Hargis,

secretary, has contracted for erection of clubhouse.

Tenn., Chattanooga.—Sanatorium.—Drs. Edward T. Newell and E. D. Newell awarded contract to Cox & Rider, Chattanooga, for erection of sanatorium; white brick front; cost \$14,000; plans by Huntington & Sears, James Bldg., Chattanooga. (Previously described.)

SCHOOLS

Fla., Fort Myers.—Lee County School Board, D. W. Summer, superintendent, will expend \$30,000 to erect school building previously noted; 126x72 feet; 10 classrooms, auditorium, library and private office; brick; steam heat; plans by W. A. Edwards, Atlanta, Ga.; contract awarded to C. D. Smith, Albany, Ga.

Ga., Rome.—Shorter College.—Shorter College awarded contract to Pierce & Francisco of Gainesville, Ga., for erection of 10 dormitories, each to accommodate 100 students, and college building; fireproof construction; cost, \$100,000; plans by W. T. Downing, Prudential Bldg., Atlanta, Ga. (Previously noted.)

La., New Orleans.—Holy Cross College awarded contract to John Lugenbuhl, 1018 Elmira St., New Orleans, for erection of athletic building; 100x70 feet; mill construction; electric lighting; cost \$5000; plans by Toledano & Morgan, New Orleans. (Previously noted.)

Md., Baltimore.—Morrow Bros., 218 W. Saratoga St., Baltimore, have contract for completion of No. 2 school at Gough and Stiles Sts.; cost about \$107,000. (Previously noted.)

S. C., Charleston.—Board of Visitors, J. E. Smith, secretary, awarded contract to Simons-Mayrant Company, 16 Broad St., Charleston, for erection of army and quarters at Citadel (Military College of South Carolina); 146x36 feet, with two wings 28x75 feet; brick; ordinary construction; heating contract let separately; cost \$40,000; plans by Todd & Benson, Charleston. (Recently noted.)

Tex., Austin.—School Board awarded contract at \$43,250 to J. F. Johnson of Denton, Tex., for erection of South Austin and Hyde Park school, and at \$8000 to Kauffman Heating & Engineering Co. of St. Louis, Mo., for combination direct-radiator and ventilator heating system; plans by Endress & Walsh, Bosche Bldg., Austin. (Recently noted.)

Va., Richmond.—Southern Benedictine Society, Belmont, N. C., will expend \$57,000 to erect military college; 161 feet 6 inches by 72 feet; brick, stone and concrete; plans by F. Michael, Belmont, N. C.; contract recently noted awarded to W. A. Chesterman, 1117 Mutual Bldg., Richmond.

STORES

D. C., Washington.—Joseph Schenker, 1117 F St. N. W., awarded contract to R. J. Beall Construction Co., 1217 F St. N. W., for remodeling building at 13th and F Sts. N. W., including renewal of interior and new facades; cost \$8000; plans by Julius Wenig, 1223 F St. N. W., Washington.

Tex., Greenville.—C. B. Jones and W. B. Wise, Greenville, have contract to erect two-story brick business building; 54x70 feet.

Tex., Houston.—C. Schwarz, 601 Preston Ave., awarded contract to John Stadler, 1120 Chenevert St., Houston, for erection of store building recently noted; 50 feet 6 inches by 124 feet; mill construction; cost \$18,000; plans by R. D. Steele, 212 First National Bank Bldg., Houston. (See "Machinery Wanted.")

La., New Orleans.—Otto F. Briede awarded contract to Charles Pfister, New Orleans, for erection of addition to building recently noted; fireproof construction; cost \$3700; plans by A. S. Bendernagel (address, care of Mr. Briede).

•Tex., Palacios.—Palacios Baptist College awarded contract to C. F. Emmons, Palacios, for erection of proposed girls' dormitory; cost \$17,000.

Tex., Anson.—J. M. Wilson awarded contract to J. J. Eyer for erection of business building; brick; one-story; 30x55 feet; construction begun.

Tex., Bryan.—Joe Denena awarded contract to C. E. Jenkins, Bryan, for erection of business building; one-story; brick.

Tex., Greenville.—C. B. Jones and W. B. Wise awarded contract to W. T. Dickson and B. F. Britton of Greenville for erection of two-story brick business building; 52x70 feet.

THEATERS

N. C., Winston-Salem.—Robert Hancock, manager, awarded contract to Carolina Construction Co., Greensboro, N. C., for erection of Liberty Theater; basement, main auditorium and gallery for negroes; cost \$11,000; plans by Willard Northup of Winston-Salem.

WAREHOUSES

Md., Baltimore.—Armstrong, Cator & Co., 13-15 W. Baltimore St., awarded contract to

John Cowan, 106 W. Madison St., Baltimore, for erection of warehouse on West German St.; fireproof construction; six stories and basement; 29x90 feet; plans by Wyatt & Nolting, Keyser Bldg., Baltimore. (Recently mentioned.)

RAILROAD CONSTRUCTION

RAILWAYS

Ala., Birmingham.—J. M. Dewberry, vice-president of the Tidewater Railroad Co., is reported as saying that construction of the line will begin by March 1 or sooner and that all financial arrangements with the contractors are about completed.

Ala., Manistee.—The Manistee & Repton Railroad Co., Inc., is reported chartered with \$10,000 capital. Incorporators are J. H. Lyons, Marshall Turner, R. F. Mitchell and the United Lumber Co., Inc.

Ark., Helena.—The Helena Interurban Company, says a dispatch, will apply for a franchise in Helena for an extension of about two miles. E. C. Horner is president and general manager. It is also contemplated to extend to Westover, nine miles.

Ark., Percy.—The Clark Lumber Co., it is reported, contemplates extending its railroad from Percy to Hot Springs, Ark., about 14 miles.

Ark., Pine Bluff.—J. F. Rutherford of Pine Bluff, president of the Anderson & Saline River Railroad, is reported as saying that he has sold 14 miles of the line to Northern capitalists, who may make an extension to connect with the Rock Island system.

D. C., Washington.—The Washington, Westminster & Gettysburg Railroad Co. has applied to the Public Service Commission of Maryland to build its line through that State from Brentwood via Prince George's, Montgomery, Howard, Frederick and Carroll counties, and thence to Gettysburg, Pa. It proposes to issue \$100,000 of stock, besides \$25,000 of bonds and \$6000 of preferred stock on each mile built; headquarters at Washington, D. C.

Fla., Tampa.—Legal notice is given that application will be made February 15 to incorporate the Atlantic, Okeechobee & Gulf Railway Co., with headquarters at Tampa, to build a line from there east and southeast to Miami, Fla., about 250 miles, with a branch from Melbourne southwest to Fort Myers, with another branch from the latter place to a point at or near Tampa; also a branch from Basinger to St. Cloud; capital \$1,000,000, but business may begin when \$100,000 is subscribed. A meeting to organize will be held at the Florida Trust Co., Jacksonville, on March 14. Henry Clay Ferriol of New Orleans, La., is president; Robert L. Riley of Jacksonville, Fla., first vice-president; Walter Graham of Arcadia, Fla., second vice-president; A. H. West of Jacksonville, third vice-president; W. H. Milton of Marianna, Fla., treasurer; Daniel A. Simmons of Jacksonville, secretary; Francis B. McGary of Jacksonville, general counsel, the others interested being E. E. West, William S. Jordan and J. O. McPherson of Jacksonville, Hunter W. Ralford of Ralford, Fla., and the Broward Land Co., of which E. L. Higbee is president. Hiram McElroy will be chief engineer.

Ga., Atlanta.—An official is reported as saying that surveys are under way for the Atlanta Northeastern Railroad from Atlanta via Creighton to Union Gap, 140 miles. F. H. Cothran, Candler Bldg., Atlanta, Ga., is engineer.

Ga., Graymont.—The Hickson Lumber Co., it is reported, will build a railroad from Graymont toward Midville. Headquarters of the company at Cheraw, S. C.

Ga., Richland.—The Georgia, Florida & Alabama Railway, which has been authorized to issue \$390,000 of bonds, is reported contemplating an extension from Richland to Columbus, Ga., about 40 miles. J. P. Williams is president at Atlanta, Ga., and C. G. Barney, chief engineer at Bainbridge, Ga.

Ga., Summit.—The Hickson Lumber Co., Cheraw, S. C., says there is nothing definite yet regarding the proposed railroad out of Summit. It owns a large body of timber near there, but it is not ready for development.

Ky., Stearns.—R. L. Stearns, secretary and treasurer of the Kentucky & Tennessee Railway, is quoted as saying that the company contemplates building an extension 12 miles long to develop coal and timber lands for the Stearns Coal & Lumber Co.

La., St. Martinsville.—Robert Martin is reported working on a plan to secure the building of a railroad from a connection with the Southern Pacific Railway to Cypress Island,

about four miles. It may be built by the Southern Pacific, of which E. B. Cushing is engineer of construction at Houston, Tex.

Mo., Canton.—H. P. Taussig and J. M. Gore of St. Louis are reported promoting a plan for an electric interurban railway from Canton to Memphis, Mo., about 40 miles. The roadbed of an abandoned line may be used.

Mo., Savannah.—Reported that the Iowa Southwestern Railway contemplates building a line from Blanchard to Savannah, Mo., about 50 miles. A. H. Ross is general manager at Manning, Iowa.

N. C., Hickory.—A dispatch says that a mass-meeting has been held to promote the building of an electric railway from Hickory to Cherryville, and a Mr. McKay of New York is said to be interested. The Mayor of Hickory may be able to give information.

N. C., Salisbury.—A. H. Eller, chairman of the Board of Trade committee on the proposed railroad from Winston-Salem to Yadkinville, about 25 miles, and it may be extended to Elkin, N. C. The committee consists of A. H. Eller, chairman; H. G. Chatham, George W. Hinchaw, J. T. Benbow and A. F. Sams.

N. C., Winston-Salem.—A committee has been appointed to prepare charter for the proposed railroad from Winston-Salem to Yadkinville, about 25 miles, and it may be extended to Elkin, N. C. The committee consists of A. H. Eller, chairman; H. G. Chatham, George W. Hinchaw, J. T. Benbow and A. F. Sams.

S. C., Brownsville.—The Bennettsville & Cheraw Railroad is making arrangements to build an extension of 11 miles from Brownsville to Sellers, S. C., on the Atlantic Coast Line. H. A. Page is general manager at Bennettsville, S. C.

S. C., Denmark.—Plans are being promoted to build a railroad from Denmark to Ehrhardt, 16 miles. C. W. Garis, S. G. Ray, J. G. Brooker, Asa Baxter and others of Denmark are interested.

Tenn., Middleton.—The New Orleans, Mobile & Chicago Railway, it is rumored, will soon begin construction of an extension northward from Middleton to Jackson, Tenn., about 45 miles. L. S. Berg is president at 49 Wall St., New York.

Tenn., Nashville.—H. H. Mayberry of Franklin, Tenn., president of the Nashville-Gallatin Interurban Railway, is reported as saying that offices will be opened after February 1 in Nashville, and that the W. K. Palmer Company, engineer, Dwight Bldg., Kansas City, Mo., has been engaged on the location work. Survey will begin by January 20.

Tex., Austin.—One of the gentlemen interested writes confirming the report that R. A. Love has made a proposition to build a railroad from Austin to Lockhart, Tex., but he says there is nothing tangible at present, no contract having been made.

Tex., Beeville.—The Nueces Valley Railroad Co. of Beeville, says a dispatch, has located 53 miles of its line out of Beeville toward Clareville, Oakville and Cotulla, and President W. A. Frisby is quoted as saying that construction will begin by March 1. The line will reach eventually Eagle Pass on the west and Aransas Pass on the east.

Tex., Denton.—The Denton Chamber of Commerce, Alvin C. Owsley, president, is reported promoting plans for a railroad from Denton to Sildell, Tex., about 20 miles.

Tex., Denison.—An officer of the Missouri, Oklahoma & Gulf Railroad says there is no foundation for the report recently noted that extensions will be made in Texas at present.

Tex., Edna.—J. S. Hawkins and others have been appointed a committee by the Chamber of Commerce on a movement to build a railroad through Lavaca, Jackson and Calhoun counties, probably to Port O'Connor, on the Gulf.

Tex., El Paso.—J. L. Dyer, attorney, representing Edward Kennedy of Houston, promoter of the Altus, Roswell & El Paso Railway, has, it is reported, asked a bonus of \$100,000 from El Paso. The proposed line will run from Oklahoma City to El Paso, about 600 miles, via Altus, Okla.; Roswell, N. M.; Memphis, Wellington, Lubbock and other points in Texas. There will be over 200 miles in Texas.

Tex., Fort Worth.—The Northern Texas Traction Co. has increased its capital stock \$1,000,000, making the total \$4,500,000, and among other things will build an extension

MACHINERY, PROPOSALS AND SUPPLIES WANTED

Manufacturers and others in need of machinery or supplies of any kind are requested to consult our advertising columns, and if they cannot find just what they wish, if they will send us particulars as to the kind of machinery or supplies needed we will make their wants known free of cost, and in this way secure the attention of manufacturers and dealers throughout the country. The Manufacturers Record has received during the week the following particulars as to machinery and supplies wanted.

from Fort Worth to the Texas Christian University, southwest of the city. G. H. Clifford is manager at Fort Worth.

Tex., Galveston.—The Gulf, Colorado & Santa Fe Railway, it is reported, will spend \$15,000 for track changes in the Galveston yards. F. Merritt is chief engineer at Galveston.

Tex., Mobeetie.—F. P. Reid, president of the Central Construction Co. at Mobeetie, is quoted as saying that construction will begin at Vernon, Tex., by April 1 on the American Central Railway, all financial arrangements having been perfected.

Tex., Pecos.—J. D. Beeman, agent for the Pecos Valley Northern Railway Co., is reported securing rights of way for a line to Alpine and Boquillas, on the Rio Grande, about 170 miles.

Tex., Jacksboro.—R. B. Williams of Scranton, Pa., and E. E. McIlhennan, chief engineer, are reported promoting the Jacksboro Southern Railroad, to be built from Jacksboro to Oran, about 20 miles, financing being complete.

Tex., Sweetwater.—An officer of the Santa Fe denies the press report that it is contemplated to build a line from Sweetwater to Oklahoma City.

Tex., San Antonio.—An official of the Galveston, Harrisburg & San Antonio Railway advises that there is no foundation for the rumor that the company contemplates large terminal improvements at San Antonio.

Tex., Whiteland.—Reported that the Gulf, Colorado & Santa Fe Railway will build yards at Whiteland, a new townsite. F. Merritt is chief engineer at Galveston, Tex.

Va., Richmond.—The Old Dominion Development Co., Mutual Bldg., Richmond, Va., will, it is reported, build a railroad from the Carbon Hill Coal Mines, 15 miles northwest of Richmond, to Laurel Station, on the Richmond, Fredericksburg & Potomac Railroad.

Va., Washington.—The Manufacturers Record is informed that the Blue Ridge Railroad is the name proposed for the line projected from Washington to Culpeper, Va., 20 miles, via Sperryville, Harolin and State Mills. Route lies through rolling country. A subscription of \$100,000 has been made by Rappahannock county. Officers not yet elected. Mayor E. W. Brown of Washington, Va., may give information.

Va., Washington.—A dispatch says that Mrs. A. M. Moore of Cleveland, O., is working on a railroad plan for a standard-gauge line from Culpeper to Sperryville and Washington, Va., about 20 miles.

Va., Whittles Depot.—The Southern Railway has authorized construction of second track south of Franklin Junction to connect with second track to Whittles. W. H. Wells is engineer of construction at Washington, D. C.

W. Va., Charleston.—An officer of the Kanawha & Michigan Railway denies report that the company will widen tunnels, but it will make other improvements. R. P. Black is engineer maintenance of way at Charleston.

STREET RAILWAYS

Ark., Helena.—The Helena & West Helena Electric Co., it is reported, will lay new rails on its entire line, about four miles long.

Ga., Macon.—A company is reported being organized to build a street railway from North Highlands to the Palisades on the Ocmulgee River. The Macon Railway & Light Co. may be able to give information.

Okla., Muskogee.—The Muskogee Electric Traction Co., it is reported, will build an extension. R. D. Long is chief engineer.

S. C., Spartanburg.—The Spartanburg Railway, Gas & Electric Co. is reported contemplating a further extension to Whitney. F. H. Knox is vice-president and general manager.

Tex., Austin.—N. A. Dawson of Austin, representing Claude V. Birkhead and associates of San Antonio, is reported as saying that some progress is being made toward the construction of the proposed line into South Austin. The route is along the Fredericksburg road to the Bouldin addition and back to the city, making a loop.

Tex., Palestine.—V. S. Heiny of Corpus Christi, Tex., is reported seeking a franchise for an electric railway in Palestine.

Va., Richmond.—The City Council has passed an ordinance authorizing the contemplated extension of the Richmond & Henrico Railway, including a 1250-foot steel viaduct, into Fulton. F. W. Scarborough is consulting engineer.

Establishes New York Office.

The Davenport Locomotive Works, Davenport, Ia., announces the establishment of an office at Room 1020, No. 30 Church St., New York, with H. T. Armstrong in charge.

Air Lift.—City of Clarksdale, Miss., Walter S. Robe, general superintendent, wants prices on air lift for water plant.

Baling Press.—Wallace M. Quinn, Crisfield, Md., wants to purchase second-hand press for baling sea grass in 200-pound bales.

Boiler.—See "Water-works Equipment."

Bridge Construction.—W. R. Pistole, Clerk, Meridian, Miss., will receive bids until 2 P. M. February 6 for construction of wooden bridge across Opossum Creek as per plans and specifications on file in Chancery Clerk's office.

Bridge Construction.—Board of Public Works, Kansas City, Mo., will receive bids until January 30 for construction of two bridges as follows: Reinforced-concrete arch bridge over Blue River at 15th St., requiring about 3600 cubic yards of concrete, 300,000 pounds of steel and 1260 square yards of cross-tied-block pavement; reinforced-concrete arch bridge over Brush Creek at Cleveland Ave., containing 900 cubic yards of concrete, 80,000 pounds of metal and 360 square yards cross-tied-block pavement; bids may be made upon each bridge separately or may be included in one tender; plans and specifications on file in office Board of Public Works, or bidders may obtain copies by application to Waddell & Harrington, Leslie-Orear Bldg., Kansas City, upon payment of \$5.

Bridge Construction.—Terrebonne parish, J. C. Dupont, president Police Jury, will receive bids with plans not later than 2 P. M. February 7 at Courthouse, Houma, La., for constructing turning bridge across Bayou Terrebonne; span opening, 50 feet; total length, 132 feet, and 14 feet wide; cross-tied piling, 12x12; height from water, 10 feet; contractors must get survey and permit from Secretary of War, Washington, D. C.

Bridge Construction.—Bids will be received at clerk's office, Gate City, Va., until noon January 30 for construction of steel bridge 192 feet 6 inches long over North Fork of Holston River; plans and specification on file in office of P. St. J. Wilson, State Highway Commissioner, Richmond, Va., and in clerk's office, Gate City, Va.; certified check for \$250 to accompany each bid; further information furnished on application to P. St. J. Wilson.

Bridge Construction.—Bids will be received at Clerk's office, Lawrenceville, Va., until noon January 23 for construction of steel bridge 265 feet 3 inches long over Meherrin River, in Brunswick county; plans and specifications on file in office of P. St. J. Wilson, State Highway Commissioner, Richmond, Va., and Clerk's office, Lawrenceville; certified check for \$250 to accompany each bid; further information furnished on application to P. St. J. Wilson.

Building Materials.—Olin Gerlach, Frostburg, Md., wants prices on building materials of all kinds for \$50,000 Masonic Temple to be erected at Cumberland, Md.

Building Materials.—Deland Mining & Milling Co., Havre de Grace, Md., wants prices on building materials.

Cableway.—See "Excavating Machinery."

Cars.—Jos. E. Bowen, 901 Bank of Commerce Bldg., Norfolk, Va., wants prices on standard-gauge logging cars, tank cars for petroleum, and 12 cars convertible type (Rogers ballast preferred).

Cars.—Jos. E. Bowen, 901 Bank of Commerce Bldg., Norfolk, Va., wants 5 to 10 wood frame tank cars; 4000 to 6000 gallons capacity.

Castings.—J. F. Fitch, Buchanan, Va., wants to correspond with manufacturers of small castings, such as toys, floor mops, etc.

Cells.—See "Vault, Cells, etc."

Conveyor Screws, etc.—W. P. Carson, R. F. D. No. 3, Taylorsville, N. C., wants names and addresses of manufacturers of small auger-propelling screws or conveyor; also of small eccentrics and small cog gearing, coil springs, machine bolts and screws, etc.

Cotton Compress.—C. Bleece, Room 15 Lee Bldg., Memphis, Tenn., wants prices on second-hand cotton compress.

Crane, etc.—Sealed proposals will be received at office of General Purchasing Officer, Isthmian Canal Commission, Washington, D. C., until 10.30 A. M. January 27, and then

opened for furnishing trolley crane and runway, complers for rock drill air hose, wire rope, copper ladder rungs, pig tin and emery wheels; blanks and general information relating to this circular (No. 618) may be obtained at above office or offices of assistant purchasing agents, 24 State St., New York; 55 National Realty Bldg., New Orleans; 1093 North Point St., San Francisco, Cal.; also from U. S. Engineer Office in following cities: Seattle, Wash.; Los Angeles, Cal.; Baltimore, Philadelphia, Pittsburg, Boston, Buffalo, Cleveland, Cincinnati, St. Paul, Detroit, Milwaukee, Chicago, St. Louis, Chattanooga, Louisville, Mobile and Galveston; Commercial Club, Kansas City; Chamber of Commerce, Quincy, Ill., and Chamber of Commerce and Board of Trade, Tacoma, Wash.; F. C. Boggs, Captain, Corps of Engineers, U. S. A., General Purchasing Officer.

Crane.—Sealed proposals endorsed "Proposals for 60-ton Electric Travelling Crane" will be received at bureau of yards and docks, Navy Department, Washington, D. C., until 11 A. M. February 4, and then and then publicly opened, for 60-ton electric traveling crane in building No. 23 at navy-yard, Norfolk, Va. Specifications can be obtained on application to bureau or to commandant of navy-yard named; R. C. Hollyday, chief of bureau.

Crushing and Grinding Plant.—Deland Mining & Milling Co., Havre de Grace, Md., wants prices on crushers, burr stone mills, Kent and Griffin mill, tube or ball mill, sand dryer, sand screens, engines, boilers, shafting, pulleys, belting, elevators, conveyors and general machinery for crushing and grinding plant.

Dredging.—U. S. Engineer Office, Galveston, Tex. Sealed proposals for dredging channel between Brazos River and Matagorda Bay, Tex., will be received at this office until February 11, and then publicly opened; information on application; G. P. Howell, Major, Engineers.

Dredging Machinery.—See "Excavating Machinery."

Engine.—See "Water-Works Equipment."

Excavating Machinery.—C. L. Bessonneite, Eugene, Ore., wants to correspond with manufacturers of excavating machinery in the aerial or cable transmission line, such as used in dam building; as a cableway suspended between two towers, and an orange-peel bucket digger.

Fire Engine and Wagon.—Office of Commissioners of District of Columbia, Washington, D. C. Sealed proposals will be received at this office until 2 P. M. February 15 for furnishing one gasoline motor-driven fire engine and hose wagon combined. Specifications, form of proposal and necessary information may be obtained on application to property clerk, D. C., Room 329 District Bldg.; Cuno H. Rudolph, John A. Johnston, William V. Judson, Commissioners, D. C.

Flour Mill Machinery.—Owen Slider, Littleton, W. Va., wants prices on flour-mill machinery.

Furniture.—John H. Wagner, 225 E. Poplar St., York, Pa., wants names and addresses of manufacturers of furniture for Federal buildings.

Gas Producer.—Owen Slider, Littleton, W. Va., wants prices on gas producer for 40 horse-power gas engine.

Glass.—R. D. Steele, 212 First National Bank Bldg., Houston, Tex., wants prices on plate glass.

Glove Machinery.—Prairie View Development Co., Houston, Tex., will want machinery for manufacturing white duck gloves.

Gearing.—See "Conveyor Screws, etc."

Graphite Plant.—John N. Adams, Del Rio, Tenn., wants estimates on graphite plant to treat 20 tons of gangue daily; will furnish details, samples, etc.

Grist-mill Supplies.—W. P. Carson, R. F. D. No. 3, Taylorsville, N. C., wants to purchase grist-mill supplies.

Handles.—J. F. Fitch, Buchanan, Va., wants to correspond with manufacturers of handles for small castings, such as toy floor mops.

Hames Machinery.—L. E. Mathis, Jackson,

Tenn., wants to correspond with manufacturers of or dealers in machinery for manufacturing hames.

Heating Plant.—W. W. Graham, secretary School Board, Burkburnett, Tex., will receive bids until 3 P. M. January 24 for installation of heating plant for school.

Holisting Engine.—Jos. E. Bowen, 901 Bank of Commerce Bldg., Norfolk, Va., wants 8x12 cylinder holisting engine, with double cylinder and double drum.

Horse Collars.—J. Lindsay Wells Company, 606 Central Bank Bldg., Memphis, Tenn., wants names and addresses of manufacturers of horse collars.

Ice-plant Supplies.—W. C. Newman, Farmville, Va., wants four or five-ton tank for manufacturing ice blocks, 14x14x38 inches; also cans and tank coils.

Lamps.—T. J. Thornhill, 239 S. Harwood St., Dallas, Tex., wants catalogues and prices on oil lamps for chandeliers and tables.

Levee Construction.—Board of Mississippi Levee Commissioners, Greenville, Miss., will receive bids until noon February 1 for levee enlargement work amounting to about 672,000 cubic yards; specifications and information may be obtained from W. J. Shackelford, chief engineer; each bid to be accompanied by forfeit of 3 per cent.

Locomotive.—Jos. E. Bowen, 901 Bank of Commerce Bldg., Norfolk, Va., wants prices on 12 or 18-ton standard-gauge logging locomotive.

Locomotive.—Joseph E. Bowen, 901 Bank of Commerce Bldg., Norfolk, Va., wants prices on standard-gauge 12, 13 or 14-inch mogul or 19-wheeler locomotive; prompt shipment.

Lumber, Hardware, etc.—Proposals for lumber, manganese steel pins, chain, nails, screws, luoyis, anchors, valves, cocks, oil cups, hose strainers, slip scrapers, counter scales, manila rope, packing leathers, leather fillet, coke, cupola lining blocks, fire-brick, chairs, rules, shellac, enamel, etc. Sealed proposals will be received at office of General Purchasing Officer, F. C. Boggs, Captain, U. S. A., General Purchasing Officer Isthmian Canal Commission, Washington, D. C., until 10.30 A. M. January 31, at which time they will be opened in public, for furnishing above-mentioned articles. Blanks and general information relating to circular No. 617 may be obtained from this office or offices of assistant purchasing agents, 24 State St., New York; 55 National Realty Bldg., New Orleans, and 1093 North Point St., San Francisco; also from U. S. Engineer offices in Los Angeles, Baltimore, Philadelphia, Pittsburg, Boston, Buffalo, Cleveland, Cincinnati, Chicago, St. Louis, Detroit, Milwaukee, St. Paul, Chattanooga, Louisville, Mobile and Galveston; Commercial Club, Kansas City; Chamber of Commerce, Quincy, Ill., and Chamber of Commerce and Board of Trade, Tacoma.

Metal Doors and Windows.—R. D. Steele, 212 First National Bank Bldg., Houston, Tex., wants prices on fireproof metal doors and windows.

Metal Front.—R. D. Steele, 212 First National Bank Bldg., Houston, Tex., wants prices on metal store front.

Metal Tubes.—M. S. Dougherty, care of Baton Rouge Grocery Co., Baton Rouge, La., wants names and addresses of manufacturers of soft metal tubes for tooth or soap paste; tubes to roll at bottom.

Metal Manufacturers.—Hollow Handle Hoe Co., Hope, Ark., wants names and addresses of manufacturers of small metal novelties.

Metal Trucks.—Galveston Cross-tied Co., Galveston, Tex., wants prices on metal trucks for treatment of wooden paving blocks; gauge of cylinder track, 20 inches; cylinder, 6 feet (not 6 inches, as was recently incorrectly reported) in diameter.

Milling Machinery.—See "Crushing and Grinding Plant."

Mining Machinery.—J. W. Payne, Donohoe, N. C., will want prices on mining machinery.

Oil Mill Machinery.—Broussard Cotton Oil Co., Broussard, La., wants names and addresses of manufacturers of machinery for extracting peanut oil.

Overall Machinery.—Prairie View Development Co., Houston, Tex., will want machinery for manufacturing white duck overalls.

Paving.—City of Tuscaloosa, Ala., will receive bids February 2 for construction of 19,000 square yards of brick, wood block, sheet asphalt or bituminous pavement; W. B. Nicol, City Engineer.

Paving.—Tampa Bay Land Co., Tampa, Fla., will receive bids until 2 P. M. February 7 for grading and paving 3½ miles of road from northern boundary of South Tampa to south line of Section 10, Township 30 south;

paving to be 10 feet wide and 10 inches thick; material, shell.

Paving, etc.—Proposals addressed to City Council, Augusta, Ga., will be received by streets and drain committee until 4 P. M. January 23 for furnishing material and labor and setting all stone curbing which may be ordered by City Council during 1911; also until same date for furnishing material and labor and laying cement sidewalks which may be ordered by City Council during 1911; specifications may be had by applying at above office; certified check for \$100 to be deposited with each bid; Nisbet Wingfield, City Engineer and Commissioner Public Works.

Paving.—Edward Woodall, Mayor, Hillsboro, Tex., will receive bids until 3 P. M. January 24 for 31,500 square yards of paving, 12,711 linear feet combination curb and gutter; specifications cover brick, bitulithic and concrete pavements. The city reserves the right to reject any or all bids or parts of bids; specifications on file at city hall, Hillsboro, or E. L. Dalton, consulting engineer, Dallas, Tex.; bidders wanting specifications sent out of city for personal use will be charged actual cost; certified check for \$1000 must accompany each bid.

Paving.—Bob Farman, City Clerk, Oklahoma City, Okla., will receive bids until 5 P. M. January 23, and will be considered by Mayor and Council in Council Chamber, City Hall, at 10 A. M. January 24, for paving north and south alley of block 16, Original Plat, width of 20 feet with sheet asphalt on five-inch Portland cement concrete foundation; east and west alley of block 62, Original Plat, 20 feet with vitrified brick on five-inch Portland cement concrete foundation; plans and specifications on file in office of City Clerk; each bid to be accompanied by certified check for 3 per cent. of same.

Paving.—Board of Commissioners, Tulsa, Okla., will receive bids at office of City Auditor until 9:30 A. M. January 27 for paving and otherwise improving streets in 16 improvement districts, including Districts Nos. 20, 41, 53, 52, etc. Bidders are requested to submit bids upon 5 and 10-year guarantees for maintenance; plans and specifications on file in office of City Engineer; bids to be made upon proposal sheets furnished by City Engineer, and be accompanied by certified check for 5 per cent. of approximate total cost of work, based upon bid with which submitted; E. B. Cline, City Auditor.

Paving.—Baltimore (Md.) Board of Awards, care City Register, City Hall, will receive bids until 11 A. M. January 25 for grading, curbing and paving with cobblestone, etc., Eutaw St. from Fremont Ave. to Henrietta St.; Howard St., from Cross to Henrietta St.; Hamburg St., from Howard to Sharp St., and Hamburg St., from Eutaw to Warner Sts.; specifications and proposal sheets will be furnished on application to office of B. T. Fendall, City Engineer.

Phosphate Rock.—E. L. Fowler, Box 201, Tulsa, Okla., wants samples of phosphate rock.

Piping.—R. E. Ward, Mayor, Georgetown, Tex., will receive bids until January 23 for furnishing about 300 tons of class "B" cast-iron water pipe; specifications on file with F. H. Lancashire, Dallas, Tex.

Rails.—Jos. E. Bowen, 901 Bank of Commerce Bldg., Norfolk, Va., wants three miles of 35-pound relaying rails.

Road Construction.—Coke County Pike Commission, George W. Gorrell, secretary, Newport, Tenn., will receive bids until 2 P. M. January 27 for grading about 18 miles and macadamizing about 35 miles of roads, in accordance with plans and specifications on file in office of engineer at Newport; bids to be received on entire work and on certain portions of same; each bid on entire work to be accompanied by certified check for \$3500, and on any division by certified check for \$750.

Roofing.—George J. Stoneman, R. F. D. No. 5, Richmond, Va., will want roofing.

Safe.—L. C. Prather, Baldwin, Mass., will purchase safe.

Screens.—See "Crushing and Grinding Plant."

Sewer Construction.—Proposals addressed to City Council, Augusta, Ga., will be received by health committee until 4:30 P. M. January 23 for furnishing labor and material and constructing pipe sewers which may be ordered by City Council during 1911; specifications may be had by applying at office; certified check for \$100 to be deposited with each bid; Nisbet Wingfield, City Engineer and Commissioner of Public Works.

Screws, Bolts, etc.—See "Conveyor Screws, etc."

Springs.—See "Conveyor Screws, etc."

Specialties.—Western Specialty Co., 1415 W. Madison St., Chicago, Ill., wants to corre-

spond with manufacturers of mail-order specialties.

Tank.—See "Water-Works Equipment."

Tanks, Pumps, Meters, etc.—Sealed proposals endorsed "Proposals for Oil Tanks" will be received at bureau of yards and docks, Navy Department, Washington, D. C., until 11 A. M. February 11, and then and there publicly opened, for six oil tanks, with pumps, meters, gauges, piping, etc., for U. S. Navy yard, Portsmouth, N. H. Plans and specifications can be obtained on application to bureau or to commandant of navy-yard named; R. C. Hollyday, chief of bureau.

Textile Machinery.—J. D. Kennedy, 38 Southern Express Bldg., Memphis, Tenn., wants second-hand two-cylinder slasher, set of 23x144 drying cans, 80-inch napping machines, two cloth folders and one baling press.

Venetian Blinds.—People's Lumber Co., 322 First National Bank Bldg., Houston, Tex.,

wants names and addresses of manufacturers of venetian blinds.

Vault, Cells, etc.—City of Mangum, Okla., will purchase vault, cell and fire-department doors. Address The Mayor.

Water-works.—City of Dalton, Ga., Paul B. Trammell, Mayor, will open bids February 16 for construction of water-works, including concrete reservoir, 2,000,000 gallons capacity; cost \$30,000; H. S. Jaudon Engineering Co., engineers in charge, Savannah, Ga.

Water-Works Equipment.—Scott Stine, president, Board of Trustees, Custer City, Okla., wants prices on 4 inch and 6 inch cast iron pipe, pump for flow of 70 gallons per minute, engine, boiler and 50,000-gallon tank.

Wood Splitter.—T. H. Johnston & Co., Birmingham, Ala., want machines for splitting wood; for use in connection with drag saw for working up oak timber into cordwood.

INDUSTRIAL NEWS OF INTEREST

Wants to Supply Plumbing and Heating Equipment.

The E. B. Sumpter Plumbing & Heating Co., Bowling Green, Ky., desires to furnish plumbing and heating equipment for the proposed Federal building at Bowling Green, and is prepared to estimate with the successful general contractor for the erection of this building.

To Sell Interest in Timber.

An opportunity for investment in accessible hardwood timber in Western North Carolina is presented in an announcement offering a one-quarter interest in 5000 acres. Practical timber men own the remaining interest in the property and are now profitably developing it. For further details address No. 127, care Manufacturers Record.

Moloney Electric Co. in Canada.

The Moloney Electric Co., 7th and Hickory Sts., St. Louis, is making active preparations for the establishment of a branch factory at Windsor, Ont. The site for the plant consists of one and one-half acres of land, and a large amount of money will be expended for the erection and equipment of the plant. It is expected that the company will begin operations within two months in a temporary structure pending the completion of its plant.

Case Car Shows Endurance.

A Case torpedo car was recently driven by Stephen Bull Robinson, son of Frederick Robinson, vice-president of the J. I. Case Threshing Machine Co., Racine, Wis., from Denver to North Platte, Neb., a distance of 279 miles, in nine hours. As the country is not a prairie, this is somewhat of an endurance run. The car came through in excellent shape and good condition. Case cars are manufactured by the J. I. Case Threshing Machine Co.

Its Trade Expanding.

The Burruss Engineering Co., Atlanta, Ga., states that prospects are bright for an expanding trade during the coming season and that it has more interested inquirers than ever before for its oil-mill machinery. This company manufactures and installs oil-mill equipment and is sales agent for the Anderson expeller. It has appointed A. W. Green of Rock Hill, S. C., to represent it in the Carolinas during the coming season, and will also establish an office in Memphis, Tenn., to handle its trade throughout that territory.

Grading Contractors Want Work.

Having completed an important contract for the United States Steel Corporation, Stein & Lamb grading contractors, Gary, Ind., desire work for the coming season and invite notification of bids wanted for any kind of grading or excavation work in the country. They have two 35-ton steam shovels, two Kearns full-circle excavators, five 36-inch-gauge dinkies, 11 three-yard 36-inch-gauge dump cars, 20-team outfit and other equipment, which were employed on the contract referred to. An investigation of their facilities is invited.

Establishes St. Louis Office.

The Robbins & Myers Company, main office and plant, Springfield, O., has established a branch office and warehouses at 112 Pine St., St. Louis. This office will be in charge of W. L. Cumiskey, formerly Western manager at Chicago and St. Louis for the Jaudus Electric Co. of St. Louis. Upon the purchase of the Jaudus company by the Adams Bag-Nall Company Mr. Cumiskey joined the Robbins & Myers Company, and his territory will include Southern Illinois, Eastern Mis-

souri, Arkansas, Oklahoma and the Southwest, including Northern Texas. The Robbins & Myers Company manufactures Robbins & Myers standard fans, motors, generators, light grey iron castings, etc., and will carry a complete stock of these products at its St. Louis warehouses.

General Contracting and Steel Construction.

The Mackle-Crawford Construction Co., 24-26 Stewart avenue, Atlanta, announces that it has combined general contracting with its steel-construction industry and has appointed G. H. Bray to take charge of this branch of its trade. Mr. Bray was formerly superintendent of construction of the Mutual Realty Co., Atlanta, and has been closely identified with the erection of large and important structures in that city. As structural steel erectors the Mackle-Crawford Construction Co. has executed some important commissions, including the People's Improvement Building, Atlanta; warehouse construction at New Orleans, etc., and is at present erecting a 19-story building for the Third National Bank, Atlanta.

Double Miter Saw Guide.

A simple device, consisting practically of a metal guide for saw blade, which is adjustable to any horizontal or vertical angle desired and applicable to any size of saw, has been patented by Miller & Macey of 1223 Garfield Ave., Kansas City, Mo. It is called "the double miter saw guide," and is easily and effectively applied to any molding, jack rafter, etc., where mitering is necessary. The patentees claim the advantage of light weight—only two pounds; it does not require a bench; it enables any workman to cut a true miter of any angle; it will take the place of the ordinary miter box; is easily and quickly adjusted, durable and compact; can be carried on the scaffold, used on difficult stair work, jack rafters, cornices, etc.; can be carried in the tool box or in the pocket.

A. E. Fordtran at New Orleans.

The New Orleans Roofing & Metal Co., which has built up a large trade all over the United States, Central America and Mexico, under the management and control of A. S. White, who founded the works 13 years ago, has recently passed under the combined control of Mr. White and A. E. Fordtran of Galveston. The latter was for 11 years connected with the Galveston Tribune as secretary, treasurer or business manager, but now has his home in New Orleans. The present large plant of this company was erected three years ago at Scott and St. Louis Sts., on the Terminal Railroad, and covers a city square, with another square adjacent for future expansion. It is equipped with the latest improved machinery and has 150 employees, manufacturing all kinds of sheet-metal products, composition pitch and gravel roofing, and "Nola" rubber roofing.

Woolen Mill Machinery for Sale.

The attention of parties interested in the purchase of woolen manufacturing equipment is invited to an announcement offering for sale machinery at the plant of the New Albany Woolen Mill Co., Joseph Sabel, secretary and treasurer, New Albany, Ind. The plant is located on the Southern Railway, Baltimore and Ohio Railroad and Chicago, Indianapolis & Louisville Railroad. The equipment is pledged in lots to suit purchasers to whomsoever will make the highest bona-fide bids at auction sale on January 25, upon the premises, the sale to begin at 9:30 A. M. The real estate connected with the plant has been sold and immediate possession is de-

manded, making imperative the sale of the machinery. J. E. Conant & Co., Lowell, Mass., are the auctioneers, and catalogues and other details will be furnished upon application to their office, where all inquiries must be made.

Western Electric Co.'s Year.

The Western Electric Co. of Hawthorne, Ill., and 463 West St., New York, has changed its fiscal year to end December 31. For the 13 months ending December 31 its sales were about \$66,000,000, as compared with \$45,000,000 for the 12 months of 1909. These sales compare favorably with \$69,000,000 for 1906, which was the company's best year. The increase over the past year has been well distributed among the various products which the company manufactures, including telephones, cables, motors, generators, electric-light supplies, etc. During 1910 the company continued its policy of concentrating its manufacturing at Hawthorne, and several millions of dollars have been expended there. New buildings to cost \$1,000,000 have recently been authorized, which will further increase the capacity of the factory.

Manufacturing Plant for Sale.

The manufacturing plant, equipment and stock of the DeLoach Mill Manufacturing Co. will be sold at Bridgeport, Ala., on January 29 at 1 P. M. It is in operation and consists of foundry and machine shop, woodworking and pattern shop, office building, equipment, patterns, stock, etc. It is located on a 40-acre site fronting the Tennessee River, about 11 miles from the hydro-electric plant at Hales Bar, and manufactures sawmills, planers, shingle mills and allied machinery. Prospective purchasers are invited to visit the plant or write to Lawrence E. Brown, Progressive Age Bldg., Scottsboro, Ala.; David A. Grayson and W. D. Scarborough, Bridgeport, Ala., trustees. Cooper & Cooper, Huntsville, Ala., are the attorneys conducting the sale.

Opdycke & Deutsch Partnership.

Maurice Deutsch, civil engineer, of New York, has become associated with Henry G. Opdycke, 30 Church St., New York, in the practice of civil and consulting engineering, specializing in the design of pneumatic caisson and other types of foundation work for structures of all kinds, reinforced concrete work, deep mining shafts by pneumatic process, freezing process and other improved methods, including the best European practice, which has been personally investigated by this firm. The most improved instruments for measuring vibrations in buildings, bridges, etc., are kept ready for use, and accurate reports on such matters can be made. The members of this firm have been engaged in engineering and general foundation work for many years, and their association should result in a very satisfactory and advantageous development of their special and general line of engineering work.

Important Contracts for Porter & Boyd.

Among prominent Southern contractors and agents whose trade embraces the construction of roads and bridges throughout a wide territory are Porter & Boyd, Charlotte, N. C. This company has recently secured a number of important contracts, including one from the County Commissioners of Cherokee County, South Carolina (postoffice, Gaffney), for 16 steel beam bridges from 16 to 40 feet long, 12 feet wide, to be used in the construction of county roads. It has also been awarded a contract by the city of Greenville, S. C., for a steel bridge 40 feet long, the necessary material for both improvements having already been purchased. In addition to its bridge contracts the company has also secured a contract for grading one mile of the new Belt road connecting the Statesville road with the Beatties Ford road in Charlotte township, North Carolina.

Purchase Stock of Canning Machinery.

The stock of machinery and supplies of the late H. Cottingham, formerly well known in the canning industry as a large and reliable dealer in second-hand machinery and supplies for canning factories, has been purchased by A. K. Robins & Co., manufacturers of canning equipment and supplies, 724-726 E. Pratt St., Baltimore. This company has manufactured canning machinery for 36 years, and carries one of the largest stocks of canning machinery in the United States. Augmented by the Cottingham stock, the company is in a position to furnish machines on very short notice. A catalogue of 187 pages illustrates and describes its equipment for canning various fruits and vegetables and presents valuable information regarding the operation of canning factories. At the

annual convention of the canning machinery association, which will be held at Milwaukee early in February, A. K. Robins & Co. will be represented by S. M. Sindall, the senior member of the firm.

Buchanan Jaw Crushers.

The George V. Cresson Company, Allegheny avenue, west of 17th street, Philadelphia, and 90 West street, New York, has issued a circular detailing the advantages of modern all-steel ore and rock crushers of large capacity for mines, cement and stone-crushing plants. Merits claimed for the Buchanan all-steel jaw crusher include strength, durability, accessibility of parts and low cost of maintenance for large capacity of output. The company states that although it has a large number of steel crushers at work crushing the hardest material, there has not been a single breakdown. Buchanan jaw crushers are driven direct, the main journals being relieved of excessive strain by a leverage of 4 to 1 by means of a powerful toggle joint, reducing the liability to heat and frequency of re-babbiting the journals. The feature of rapid replacement of crushing surfaces and the double wear permitted by inverting the worn parts is an important advantage of the jaw crusher. All wearing parts are in sight, and can always be examined, even while in operation, and each part can be removed quickly without disturbing others.

J. B. McCrary Company's Convention.

The recent annual meeting at Atlanta of President J. B. McCrary and the heads of departments and other employees of the J. B. McCrary Company, which continued for two days and culminated in a banquet tendered by the president of the company, was voted by those present as having been of great practical benefit as well as a great pleasure. The banquet was held at the Atlanta Merchants and Manufacturers Club. It was an event in business circles of the South, bringing together men who have done their part in the improvement of the cities of this section by introducing modern municipal water, light and power plants. Many prominent engineers were present besides those on the staff of the company. The work that this company has carried on with Atlanta as its base extends to many cities of Georgia and adjoining States, and is of large and increasing volume. Speeches of the evening showed the close ties of interest of the various members of this industrial organization. The officers are J. B. McCrary, president; W. M. Fambrough, vice-president and treasurer; J. C. Cook, second vice-president and chief engineer; J. O. Campbell, secretary; T. C. Trippe, manager of bond department.

Stephens-Adamson Manufacturing Co.

The Stephens-Adamson Manufacturing Co. of Aurora, Ill., has recently strengthened its organization by securing the services of G. H. Stephens. Mr. Stephens has obtained substantial interests in this company and will assume at once the management of its entire Eastern business. The Eastern office is located at 50 Church St., New York. Mr. Stephens has been a prominent factor in the conveying industry for over 20 years. He has a comprehensive knowledge of conveying and screening machinery and a wide acquaintance among the machinery users of the East. The engineering department of the Stephens-Adamson Manufacturing Co.'s New York office is in charge of J. G. Marcum. Mr. Marcum was formerly associated with Mr. Stephens in business and is recognized as a conveying engineer of unusual ability. This office is thus in a position to continue the good service rendered to the users of "S-A" machinery. Earl D. Stearns, who has ably represented the Stephens-Adamson Manufacturing Co. in the East for the past two years, will henceforth take charge of the company's Chicago office in the First National Bank Bldg. Mr. Stearns' services have been invaluable to the company and to its clients in the East, and his knowledge of conveying machinery will continue to be of value in the Chicago field. The Stephens-Adamson Manufacturing Co. is direct manufacturer of a complete line of conveying, elevating, screening and power-transmitting machinery. Its main office and shops are located at Aurora, on the main line of the Burlington route. These shops are thoroughly modern in every respect, and they are prepared to design and manufacture a high grade of machinery in the least time and in the most efficient manner. The new steel shop, which has just been completed, is one of the largest and most finely equipped for this purpose in the country.

TRADE LITERATURE.

Lowell Machine Shop Calendar.

The Lowell Machine Shop, Lowell, Mass., manufacturer of cotton-mill machinery, is issuing a calendar for 1911 which contains a reproduction of the painting, in the Corcoran Art Gallery "The Master Workman," by Coussé. It is a colortype of unusual merit.

Jeffrey Mine Fans.

Catalogue No. 25, illustrating and describing Jeffrey centrifugal fans for mine ventilation, has been issued by the Jeffrey Manufacturing Co., Columbus, O. This publication is one of the most complete catalogues which the Jeffrey company has issued on mine ventilation, and should be of value to those who are interested in this subject. It presents illustrations showing Jeffrey fan installations in various mines throughout the country, together with photographic views showing shop methods of constructing the fans. A valuable feature of the catalogue is the arrangement of engineering data in convenient form for reference purposes.

United Steel Sash.

In the construction of modern buildings requiring maximum daylight and proper ventilation United steel sash has been widely used because of its durability, proof against fire and other features. This sash is made of specially rolled sections of the best grade of steel, combined to form deep, narrow, symmetrical members, which are claimed to give the greatest possible rigidity against direct wind pressure and suction caused by passing air currents. It is manufactured by the Trussed Concrete Steel Co., Detroit, and is comprehensively described and illustrated in a catalogue which the company is distributing. This catalogue presents illustrations and descriptive data of standard types of sash, together with complete tables of dimensions and other details. It should be valuable to architects, engineers, builders and others interested in modern construction.

Hospital Cooking With Gas.

On November 11, 1910, the last coal range was removed from the kitchens of the Johns Hopkins Hospital, Baltimore. Today all kitchens of the hospital are equipped with gas appliances, and meals are prepared for hundreds of people. It is claimed, at least cost and with more comfort and under better sanitary conditions than were possible with coal. The first installations of gas ranges were made in the small ward kitchens 21 years ago; then in the diet kitchen, where food is prepared with utmost care and where the nurses receive instruction in domestic science. Later gas ranges were installed in the Nurses' Home, and in July, 1910, a three-section gas range was temporarily installed in the general kitchen. On November 4 an order was given to remove all the coal ranges and install gas appliances. The installations were made by the Gas & Electric Co., Lexington and Liberty Sts., Baltimore, and are illustrated and described in a pamphlet which the company is distributing.

Chesapeake Iron Works' Circular "C."

Special attention has been given to the subjects of motor supports in textile and factory use, monorail system with the trolley running on lower flange of steel "I" beams, hand-power travelers for trolley transfer in warehouses, etc., and swinging jib cranes, in the circular recently issued by the Chesapeake Iron Works of Baltimore. The steel motor supports are said to have found particular favor among many of the textile industries of the South, where the superiority of steel construction over wood for supporting electric motors has been recognized. These supports in construction present a combination of simplicity and practicability, which makes them easy to assemble and erect, and are light and substantial. Detail illustrations are shown in the circular of the monorail system with "I" beam, which system has not only proven itself safe, but gives a simple and efficient means of handling overhead loads with very small loss of headroom. The hand-power travelers may be used in combination with the monorail system, and as the hoist is enabled to reach any part of the floor area, the combination is especially adaptable to warehouses, stone yards, machine shops, etc. The swinging jib cranes are furnished with or without trolley, and may be used to great advantage in connection with loading or unloading platforms, and are great time-savers.

Farmers' Handbook of Explosives.

The early use of explosives in mining and excavating was originally very limited, but the fact was soon demonstrated that if cor-

rectly used they could do as much work in a moment as a man or a machine could do in many days. When this became fully understood explosives were applied to new and various kinds of work, and special explosives were manufactured to meet varying conditions. In the farming industry, as well as in others in which they are employed, the development of their uses has been very rapid. At first it was thought they were only effective for splitting stumps so that they might easily be removed, but later it was demonstrated that they could be used for splitting the stumps and lifting them from the ground at the same time. Since then the sphere of explosives for farm purposes has constantly widened, until they are now extensively used for digging ditches, grading roads, excavating cellars and foundation trenches, sinking wells, digging holes, breaking hard soil, planting and cultivating fruit trees, starting log jams and ice gorges, etc. As bearing upon their direct use for agricultural purposes, with the view of reducing the cost of production or to improve farm products, the E. I. du Pont de Nemours Powder Co. of Wilmington, Del., has issued the "Farmers' Handbook of Explosives." This publication presents interesting descriptive data, which should be of value to farmers and others, and reproduces a number of photographs illustrating the application of explosives for various farm purposes.

Old Customers.

Old and satisfied customers are the best evidence of the quality and service of goods. For years the Dodge Manufacturing Co., Mishawaka, Ind., has been filling order after order for power-transmission machinery and appliances from leading manufacturers all over the country, and no one knows better than these old, satisfied customers the true worth of the products they purchase. Many new companies making similar goods have been established since the early days of the Dodge company, and many new propositions have been presented to the engineering world, but the Dodge company states that its first customers have remained steadfast. Twenty years ago the Dunn-Green Leather Co. introduced "Independence" split-wood pulleys to New England industries, and it is said no other make has ever been on its line shafts. This company recently placed an important order for Dodge products through the Boston branch of the company. Other prominent users of Dodge products who were among the first to purchase them include F. W. Stock Company, Hillsdale, Mich.; Pittsburg Coal Co. of Wisconsin, Superior, Wis.; Studenbaker Bros. Manufacturing Co., South Bend, Ind.; Mishawaka (Ind.) Woolen Manufacturing Co.; Advance Thresher Co., Battle Creek, Mich.; Swift Manufacturing Co., Columbus, Ga.; Moline (Ill.) Plow Co.; Beloit (Wis.) Iron Works; Gear-Scott Company, Richmond, Ind., and others.

FINANCIAL NEWS

The MANUFACTURERS RECORD invites information about Southern financial matters, items of news about new institutions, dividends declared, securities to be issued, openings for new banks, and general discussions of financial subjects bearing upon Southern matters.

Review of the Baltimore Market.

Office MANUFACTURERS RECORD,

Baltimore, Md., January 18.

The Baltimore stock market continued active during the past week, there being considerable trading, especially in United Railways and Seaboard issues. The report of sales showed transactions thus: United Railways common, 16½ to 17½, with last sale at 17; do. trust certificates, 16½ to 17½, with last sale at 17½; do. income bonds, 62¼ to 62½; do. funding 5s, 85 to 85½; do. do. scrip, 85¼ to 85½; United 4s, 85½ to 85; Consolidated Gas, Electric Light & Power common, 64½; do. preferred, 90; do. 4½s, 84½ to 84½; do. do. notes, 99; Consolidated Gas 4½s, 92½ to 93; Seaboard Air Line common, 21 to 23; do. preferred, 35 to 35½; Seaboard Company common, 22½ to 24½; do. first preferred, 81 to 82½; do. second preferred, 46½ to 48½, with last sale at 48½; Seaboard 4s, stamped, 85½ to 87; do. three-year 5s, 100½ to 100; do. 10-year 5s, 100 to 100½; do. adjustment 5s, 78 to 77½; Mt. Vernon-Woodberry Cotton Duck 5s,

74½ to 74½; G.-B.-S. Brewing 4s, 42½ to 44.

Bank stocks sold as follows: Commerce, 31¼ to 31; Maryland, 25; Exchange, 160 to 159; Mechanics', 28¼; Farmers and Merchants', 48½; Union, 135; Howard, 13½; First National, 140.

Maryland Trust sold from 75 to 79; American Bonding, 80; Maryland Casualty, 97½ to 97½; Baltimore Trust, 164½ to 164; Mercantile Trust, 144½ to 143½; Fidelity & Deposit, 152; Continental Trust, 205; United States Fidelity, 150.

Other securities were traded in thus: Charleston Consolidated Electric 5s, 95; Macon, Dublin & Savannah 5s, 97 to 97½; Macon Railway & Light 5s, 96½; Memphis Street Railway 5s, 97½; Northern Central Railway stock, 121 to 124; Charlotte Electric 1st and refunding 5s, 100; Houston Oil common, 8; do. preferred, 48 to 47; Maryland Electric 5s, 97 to 97½; Norfolk Railway & Light 5s, 98½ to 98½; do. stock, 22; Atlantic Coast Line of South Carolina 4s, 97½; Atlantic Coast Line of Connecticut stock, 228 to 225; Atlantic Coast Line convertible debenture 4s, 96½ to 96½; do. Consolidated 4s, 94½; Baltimore Brick common, 2¼; Baltimore Brick 5s, 80½; St. Joseph Railway, Light, Heat & Power 5s, 96; Western Maryland 4s, 87; Augusta Railway & Electric 5s, 101½ to 101; Baltimore City 3½s, 1928, 93 to 93½; do. do. 1940, 92½ to 91½; do. do. 1980, 88 to 88½; do. 4s, 1954, 100½; Anacostia & Potomac 5s, 100½ to 101; do. guaranteed, 102½ to 102½; Carolina Power & Light 5s, 92½; Consolidation Coal, 102½ to 103; Knoxville Traction 5s, 103½; Baltimore Traction (North Baltimore Division) 5s, 110; Piedmont & Cumberland 5s, 99½; Atlanta Consolidated Street Railway 5s, 105; Virginia Railway & Power common, 25; Fairmont & Clarksburg Traction 5s, 96½ to 97; Georgia, Carolina & Northern 5s, 105½; Virginia Midland 2d, 100½; do. 5th, 106; Georgia & Alabama Consolidated 5s, 104½ to 105; Baltimore, Sparrows Point & Chesapeake 4½s, 95½; Lexington Railway 5s, 87; Baltimore Electric 5s, stamped, 87½ to 88; Newport News & Old Point 5s, 93½; Consolidation Coal refunding 4½s, 93½; Baltimore Traction 5s, 107½; Savannah, Florida & Western 6s, 125; Maryland & Pennsylvania incomes, 61½; Jamison Coal & Coke, George's Creek 5s, 87; Atlantic Coast Line of Connecticut 5-20s, 90½.

SECURITIES AT BALTIMORE.

Last Quotations for the Week Ended January 18, 1911.

Railroad Stocks.	Par.	Bid.	Asked.
Atlantic Coast of Conn.	100	228	231
Charleston Consolidated	50	33	35
Fair & Clarke, Trac. Com.	100	33	35
Georgia Sou. & Florida	100	33	35
Norfolk Ry. & L.	25	22½	23½
Seaboard Company Common	100	23½	24½
Seaboard Company 1st Pfd.	100	47	48½
Seaboard Company 2d Pfd.	100	16½	17½
United Rys. & Elec. Com.	50	16½	17½

Bank Stocks.	Par.	Bid.	Asked.
Bank of Baltimore	100	150	150
Citizens'	100	41½	42
Drovers & Mechanics'	100	220	220
Exchange	100	158	160
Farmers & Merchants'	40	48	48
First National	100	140	140
Howard	100	13½	14
Maryland	25	24½	25½
Mechanics'	100	179	180
Mechanics'	100	28½	29
Old Town	100	12	12
Union	100	135	135
Western	25	35	37

Trust, Fidelity and Casualty Stocks.	Par.	Bid.	Asked.
American Bonding	25	80	82½
Baltimore Trust	100	165	165
Continental Trust	100	235	235
Fidelity & Deposit	50	150	150
Maryland Trust	100	79	79½
Maryland Trust Pfd.	100	195½	195½
Maryland Casualty	25	58	58
Merc. Trust & Deposit	50	145½	145
Union Trust	50	69	69
U. S. Fidelity & Guar.	100	148	150

Miscellaneous Stocks.	Par.	Bid.	Asked.
Ala. Con. Coal & Iron	100	52	52
Ala. Con. Coal & Iron Pfd.	100	60	60
Con. Cotton Duck Pfd.	50	19	25
Con. Gas, Elec. L. & P. Com.	100	61	65
Con. Gas, Elec. L. & P. Pfd.	100	85	89
Consolidation Coal	100	102½	104
G. B. S. Brewing Co.	100	2	2
George's Creek Coal	100	48½	48½
Baltimore Brick	100	2	3

Railroad Bonds.	Par.	Bid.	Asked.
Atlanta & Birmingham 4s	100	89	89
Alabama Midland 5s	100	108	108
Atlantic Coast 1st 4s	100	94	94½
At. Coast Conv. Deben. 4s	100	97	97½
At. Coast Conv. 4s, Cfs., 5-20s	100	96½	96½
At. Coast Conv. 6s, Cfs.	100	105	105
At. Coast S. C. 4s	100	97	97½
Balto. & Annap. 8. L. 5s	100	107	107
Balto. & Harris, 5s	100	106	106
Balto. & Harris, Ext. 5s	100	106	106
Carolina Central 4s	100	92½	92½
Coal & Iron Railway 5s	100	101½	101½
Florida Southern 4s	100	91½	92½
Georgia & Alabama 5s	100	104½	104½
Georgia, Car. & North. 1st 5s	100	105½	105½
Georgia Pacific 1st 5s	100	113½	114½
Georgia Southern & Fla. 1st 5s	100	107	107½

Macon, Dublin & Savannah 5s.....	97 1/2	98 1/2
Maryland & Pennsylvania 4s.....	85	
Petersburg Class A 5s.....	110	
Piedmont & Cumberland 1st 5s.....	107 1/2	
Potomac Valley 1st 5s.....	107 1/2	
Raleigh & Augusta 1st 5s.....	106	
Richmond & Danville 5s.....	106 1/2	
Savannah, Florida & Western 5s.....	110	
Savannah, Florida & Western 5s.....	124 1/2	
Seaboard Air Line 4s.....	86 1/2	87
Seaboard 4s, Stp.....	86 1/2	87
Seaboard Adjustment 5s.....	77 1/2	78
Seaboard 10-year 5s.....	100	100 1/2
Seaboard 3-year 5s.....	100	100 1/2
Seaboard & Roanoke 5s.....	106	107 1/2
Seaboard & Roanoke 5s.....	100	
Silver Springs, Ocala & G. 4s.....	96	97 1/2
South Bound 5s.....	107	
Southern Railway 5s.....	107 1/2	
Virginia Midland 2d 5s.....	100 1/2	100 1/2
Virginia Midland 3d 5s.....	106	
Virginia Midland 5th 5s.....	105	
Virginia Midland G. M. 5s.....	107	108 1/2
Western Maryland 4s.....	86 1/2	89
Western N. C. Con. 5s.....	104 1/2	105 1/2
West Virginia Central 1st 5s.....	106 1/2	107
Williamson & Weldon 5s.....	110	111 1/2

Street Railway Bonds.

Anacostia & Potomac 5s.....	100 1/2	101
Anacostia & Potomac 5s, Gtd.....	102 1/2	103
Atlanta Con. Street Railway 5s.....	105	105 1/2
Augusta Railway & Electric 5s.....	100	102
Balto. City Passenger 4 1/2s.....	99 1/2	99 1/2
Balto. City Passenger 4 1/2s.....	95	95 1/2
Balto. Sp. Pt. & C. 4 1/2s.....	95	95 1/2
Balto. Traction 1st 5s.....	107 1/2	108
Balto. Traction (N. B.) 5s.....	109 1/2	
Central Railway (Balto.) Ext. 5s.....	107 1/2	
Charleston Con. Electric 5s.....	95	97
City & Suburban 5s (Balto.).....	105 1/2	
City & Suburban 5s (Wash.).....	102 1/2	
Fairmont & Clarksburg Trac. 5s.....	96 1/2	
Knoxville Traction 5s.....	103	104
Lexington Railway 1st 5s.....	88 1/2	95
Macon Railway & Light 5s.....	96	97
Maryland Electric Railways 5s.....	97	97 1/2
Memphis Street Railway 5s.....	97	97 1/2
Metropolitan 5s (Wash.).....	105 1/2	
Newport News & Old Point 5s.....	92	94
Norfolk Railway & Light 5s.....	98 1/2	98 1/2
United Railways 1st 4s.....	84 1/2	85 1/2
United Railways Income 4s.....	62	62 1/2
United Railways Funding 4s.....	85	85 1/2

Miscellaneous Bonds.

Ala. Con. Coal & Iron 5s.....	77	
Atlanta Gas 1st 5s.....	102	
Baltimore Brick 5s.....	79 1/2	81
Baltimore Electric 5s, Stp.....	87	88
Consolidated Gas 5s.....	108 1/2	109 1/2
Consolidated Gas 4 1/2s.....	92 1/2	93
Con. Gas, Elec. Lt. & P. 4 1/2s.....	84 1/2	84 1/2
Con. Gas, Elec. Lt. & P. Notes.....	98 1/2	99 1/2
Consolidation Coal Refd. 4 1/2s.....	93	93 1/2
Consolidation Coal Refd. 4 1/2s.....	102 1/2	103 1/2
Fairmont Coal 1st 5s.....	96	97
G. B. S. Brewing 1st 4s.....	44	45 1/2
G. B. S. Brewing Income 5s.....	5	6
Mt. Vernon-Woodbury Cot. Duck 5s.....	74 1/2	74 1/2
United Elec. Lt. & P. Co. 4 1/2s.....	91 1/2	92

SOUTHERN COTTON-MILL STOCKS.

Quotations Furnished by Hugh MacRae & Co., Wilmington, N. C., for Week Ending January 16.

Abbeville Cotton Mills (S. C.).....	Bid. Asked.	
Aiken Mfg. Co. (S. C.).....	72 1/2	73
American Spinning Co. (S. C.).....	160	165
Anderson Cotton Mills (S. C.).....	50	50
Anderson Cot. Mills (S. C.) Pfd.....	90	90
Arkwright Mills (S. C.).....	100	103
Augusta Factory (Ga.).....	60	65
Avondale Mills (Ala.).....	116	125
Belt Mills (S. C.).....	135	145
Bilb Mfg. Co. (Ga.).....	114	
Brandon Mills (S. C.).....	104	
Cahawes Cotton Mills (S. C.).....	125	149
Chadwick-Hoskins Mfg. Co. (N. C.).....	109	
Chadwick-Hoskins Mfg. Co. (N. C.) Pfd.....	102	
Chilenoia Mfg. Co. (S. C.).....	170	175
Clifton Mfg. Co. (S. C.).....	92 1/2	
Clifton Mfg. Co. (S. C.) Pfd.....	100	
Clinton Cotton Mills (S. C.).....	130	
Columbus Cotton Mills (Ga.).....	93	98
Courtney Mfg. Co. (S. C.).....	99	100
Dallas Mfg. Co. (Ala.).....	98	100
Darlington Mfg. Co. (S. C.).....	80	85
Drayton Mfg. Co. (Ala.).....	100	
Eagle & Phoenix Mills (Ga.).....	117	125
Easley Cotton Mills (S. C.).....	170	
Enoree Mfg. Co. (S. C.).....	54	
Enoree Mfg. Co. (S. C.) Pfd.....	100	
Enterprise Mfg. Co. (Ga.).....	80	85
Exposition Cotton Mills (Ga.).....	185	200
Gaffney Mfg. Co. (S. C.).....	71	74
Gainesville Cotton Mills (Ga.).....	70	75
Granby Cot. Mills (S. C.) 1st Pfd.....	35	
Greenville Mfg. Co. (S. C.).....	161	
Greenwood Cotton Mills (S. C.).....	58	61
Grendel Mills (S. C.).....	105	110
Henrietta Mills (N. C.).....	160	175
King Mfg. Co., John P. (Ga.).....	90	
Lancaster Cotton Mills (S. C.).....	139	
Lancaster Cot. Mills (S. C.) Pfd.....	97	100
Langley Mfg. Co. (S. C.).....	117	125
Laurens Cotton Mills (S. C.).....	130	
Limestone Mills (S. C.).....	150	170
Lockhart Mills (S. C.) Pfd.....	99	100
Lockhart Mills (S. C.).....	70	75
Loray Mills (N. C.) Pfd.....	95	98
Marlboro Cotton Mills (S. C.).....	75	
Mave Mills (N. C.).....	165	185
Mills Mfg. Co. (S. C.).....	160	
Mills Mfg. Co. (S. C.) Pfd.....	169	
Monaghan Mills (S. C.).....	160	165
Monarch Cotton Mills (S. C.).....	102	107
Newberry Cotton Mills (S. C.).....	125	140
Norris Cotton Mills (S. C.).....	125	130
Olympia Cot. Mills (S. C.) 1st Pfd.....	90	
Orangeburg Mfg. Co. (S. C.) Pfd.....	80	91
Orr Cotton Mills (S. C.).....	100	105
Pacolet Mfg. Co. (S. C.).....	98	99
Pacolet Mfg. Co. (S. C.) Pfd.....	98	100 1/2
Pelzer Mfg. Co. (S. C.).....	150	160
Piedmont Mfg. Co. (S. C.).....	171	
Poe Mfg. Co. (S. C.).....	170	
Richland Cot. Mills (S. C.) 1st Pfd.....	45	
Raleigh Cotton Mills (N. C.).....	160	165
Roanoke Mills (Va.).....	132	200
Saxon Mills (S. C.).....	127	
Sibley Mfg. Co. (Ga.).....	95	72
Soarman Mills (S. C.).....	130	140
Springstein Mills (S. C.).....	160	
Tucupau Mills (S. C.).....	300	
Trion Mfg. Co. (Ga.).....	127 1/2	
Union-Buttalo Mills 1st Pfd.....	10	
Victor Mfg. Co. (S. C.).....	115 1/2	
Warren Mfg. Co. (S. C.).....	107	

Warren Mfg. Co. (S. C.) Pfd.....	106	110
Washington Mills (Va.).....	28	
Washington Mills (Va.) Pfd.....	106	110
Whitney Mfg. Co. (S. C.).....	120	125
Williamson Mills (S. C.).....	120	125
Wisconsin Mills (N. C.).....	120	125
Woodruff Cotton Mills (S. C.).....	125	
Woodside Cotton Mills (S. C.).....	98	
Woodside Mills (S. C.) Pfd.....	96	98 1/2

Quotations Furnished by William S. Glenn, Broker, Spartanburg, S. C., for Week Ending January 16.

Abbeville Cotton Mills (S. C.).....	Bid. Asked.	
Aiken Mfg. Co. (S. C.).....	75	
American Spinning Co. (S. C.).....	160	
Anderson Cotton Mills (S. C.).....	50	
Anderson Cot. Mills (S. C.) Pfd.....	100	
Arcadia Mills (S. C.).....	100	
Arkwright Cotton Mills (S. C.).....	99	103
Augusta Factory (Ga.).....	60	65
Avondale Mills (Ala.).....	116	
Belt Mills (S. C.).....	132	140
Brandon Mills (S. C.).....	99	103
Brogan Mills (S. C.).....	90	
Cannon Mfg. Co. (N. C.).....	135	
Cahawes Cotton Mills (S. C.).....	130	135
Chadwick Mfg. Co. (N. C.) Pfd.....	100	
Chilenoia Mfg. Co. (S. C.).....	180	
Clifton Mfg. Co. (S. C.).....	85	
Clinton Cotton Mills (S. C.).....	120	
Columbus Mfg. Co. (Ga.).....	93	98
Courtney Mfg. Co. (S. C.).....	100	
Dallas Mfg. Co. (Ala.).....	98	
Darlington Mfg. Co. (S. C.).....	80	
D. E. Converse Co. (S. C.).....	100	
Drayton Mills (S. C.).....	95	105
Eagle & Phoenix Mills (Ga.).....	117	
Easley Cotton Mills (S. C.).....	145	
Enoree Mfg. Co. (S. C.).....	50	55
Enoree Mfg. Co. (S. C.) Pfd.....	96	100
Enterprise Mfg. Co. (Ga.).....	80	85
Exposition Cotton Mills (Ga.).....	200	
Gaffney Mfg. Co. (S. C.).....	70	75
Gainesville Cotton Mills (Ga.).....	72	80
Glennwood Cotton Mills (S. C.).....	150	
Gluck Mills (S. C.).....	102	106
Granby Cot. Mills (S. C.) 1st Pfd.....	35	45
Greenville Mfg. Co. (S. C.).....	155	165
Greenwood Cotton Mills (S. C.).....	57	60
Grendel Mills (S. C.).....	103	108
Hartselle Cotton Mill (S. C.).....	190	
Henrietta Mills (N. C.).....	160	175
Inman Mills (S. C.).....	100	108
King Mfg. Co., J. P. (Ga.).....	90	93
Lancaster Cotton Mills (S. C.).....	139	
Lancaster Cot. Mills (S. C.) Pfd.....	97	100
Langley Mfg. Co. (S. C.).....	120	127
Laurens Mills (S. C.).....	157	165
Limestone Mills (S. C.).....	155	160
Lockhart Mills (S. C.) Pfd.....	96	100
Loray Cotton Mills (S. C.) Pfd.....	95	97 1/2
Marlboro Cotton Mills (S. C.).....	75	80
Mills Mfg. Co. (S. C.).....	102	
Molloy Mfg. Co. (S. C.).....	104	110
Monaghan Mills (S. C.).....	104	106
Monarch Cotton Mills (S. C.).....	107	
Newberry Cotton Mills (S. C.).....	125	130
Ninety-Six Cotton Mills (S. C.).....	140	150
Norris Cotton Mills (S. C.).....	121	130
Olympia Cotton Mills (S. C.).....	90	
Orr Cotton Mills (S. C.).....	102	
Pacolet Mfg. Co. (S. C.).....	90	
Pacolet Mfg. Co. (S. C.) Pfd.....	99	102
Pelzer Mfg. Co. (S. C.).....	169	
Piedmont Mfg. Co. (S. C.).....	175	177
Poe Mfg. Co., F. W. (S. C.).....	110	125
Saxon Mills (S. C.).....	130	
Sibley Mfg. Co. (Ga.).....	71	78
Spartan Mills (S. C.).....	132	
Trion Mfg. Co. (Ga.).....	120	130
Tucupau Mills (S. C.).....	310	350
Union-Buttalo (S. C.) 1st Pfd.....	74	80
Union-Buttalo (S. C.) 2d Pfd.....	26	
Victor Mfg. Co. (S. C.).....	115	120
Warren Mfg. Co. (S. C.).....	107	
Washington Mills (Va.).....	28	
Washington Mills (Va.) Pfd.....	106	110
Whitney Mfg. Co. (S. C.).....	120	
Wisconsin Mills (N. C.).....	125	
Woodruff Cotton Mills (S. C.).....	119	118
Woodside Cotton Mills (S. C.).....	102	105
Watts Mills (S. C.).....	85	92
Williamson Mills (S. C.).....	120	125

Home Insurance Co.

The Home Insurance Co., 56 Cedar street, New York, N. Y., has issued its one hundred and fifteenth semi-annual statement, dated January, 1911, which shows total assets \$30,178,913. This includes United States bonds, State and city bonds, railroad bonds, miscellaneous bonds, railroad stocks, miscellaneous stocks, bank and trust company stocks, bonds and mortgages on real estate and cash, the latter amounting to \$2,823,450. The capital of the company is \$3,000,000; reserve premium fund, \$11,645,873; reserve for losses, \$1,168,317; surplus over contingencies and all liabilities, including capital, \$12,329,613; surplus as regards policyholders, \$16,829,613. The officers are Elbridge G. Snow, president; Emanuel H. A. Correa and Frederic C. Buswell, vice-presidents; Aeneas M. Burtis and Chas. L. Tyner, secretaries; Clarence A. Ludlum and Henry J. Ferris, assistant secretaries.

Maryland Casualty Report.

The annual report of the Maryland Casualty Co. for the year ended December 31, 1910, shows total net premiums, \$4,490,700; expenses, such as commissions, taxes, office expenses, etc., being deducted from that amount leaves \$2,740,141. From this latter is deducted losses paid, includ-

ing cost of investigation, adjustments and litigation, leaving \$742,070. Adding to this net income from investments amounting to \$198,514, and deducting commissions due to agents on uncollected premiums amounting to \$215,296, leaves \$725,287. From this latter is deducted depreciation shown in the market value of securities owned, making the total net earning to be distributed \$644,757. Out of this there was added to the premium reserve \$239,560, to the claim reserve \$146,251, reserve for sundry bills \$15,295, and there was also paid in dividends \$160,000, besides a comparatively small sum for reinsurance, leaving a balance of \$83,231.55 added to the surplus fund, which now is \$1,200,904.55.

The report, which is signed by President John T. Stone, makes mention of the fact that the company has added fidelity and surety bonding to its lines of business, and that it has been examined and certified by United States Government representatives, besides in New York, Philadelphia and Pittsburg. The company has also, owing to changes in the laws of Canada, has been enabled to increase its business in that country.

Construction of the addition to the company's building in Baltimore will begin next summer. Possession of the adjoining hotel property is to be taken on June 1, and it is expected that the new addition will be completed by October 1, 1912.

First National Bank.

A condensed statement of the First National Bank of Richmond, Va., January 7, 1911, shows total resources, \$10,627,631; loans and discounts, \$7,181,154; cash and due from banks, \$2,325,821; capital \$1,000,000; surplus fund, \$1,000,000; undivided profits, \$68,860; total deposits, \$6,864,480. John B. Parcel is president; John M. Miller, Jr., vice-president and cashier; Frederick E. Nolting, vice-president; Chas. R. Burnett, J. C. Joplin, W. P. Shelton and Alex. F. Ryland, assistant cashiers.

National Exchange Bank.

The National Exchange Bank of Baltimore, Md., reports at close of business January 7, 1911, loans and discounts, \$3,728,451; due from banks, \$1,028,368; cash and due from reserve agents, \$1,130,283; capital stock, \$1,000,000; surplus and undivided profits, \$706,361; circulation outstanding, \$924,600; deposits, \$4,546,205; total resources, \$7,565,342; Waldo Newcomer, president; Summerfield Baldwin, vice-president; R. Vinton Lansdale, cashier, and Clinton G. Morgan, assistant cashier.

First National of Birmingham.

The First National Bank of Birmingham, Ala., reports at close of business January 7, 1911, loans and discounts, \$7,824,126; cash, \$4,358,030; capital stock, \$1,500,000; surplus and profits, \$1,455,803; circulation, \$970,100; deposits, \$10,033,016; total resources, \$13,958,919. W. P. G. Harding is president; J. H. Woodward and J. H. Barr, vice-presidents; Thomas Hopkins, cashier; F. S. Foster, Thomas Bowron and J. K. Fleming, assistant cashiers; J. E. Ozburn, secretary savings department, and J. H. Wetmore, auditor.

FINANCIAL CORPORATIONS.

Ala., Anniston.—The City Bank & Realty Co., capital \$50,000, is reported organized with directors thus: President, Arthur Wellborn; vice-president, J. C. Houser; secretary-treasurer, Jas. Keith, Jr.; George E. Cater, Whitfield Clark, Talbot Ford, T. E. Kilby, W. H. McKleroy, L. E. Ogletree, John Pelham and J. J. Willett.

Ala., Anniston.—Official: The City Bank & Realty Co. incorporated; capital \$50,000. Business began January 1 with Arthur Wellborn president, C. J. Houser vice-president and James Keith secretary and treasurer.

Ala., Athens.—The Farmers and Merchants' Bank of Athens is reported incorporated; capital \$25,000; incorporators, W. T. McDaniel, J. W. Howard and R. B. Holbrook.

Ala., Birmingham.—Official: The L. G. Pettyjohn Real Estate & Insurance Co., 1826 1/2 Third Avenue, incorporated; capital \$2500, fully paid up. L. G. Pettyjohn is president and treasurer, Jas. B. Pettyjohn vice-president and Charles N. Pritchard secretary. Business began January 1.

Ala., Birmingham.—The Southern Bankers' Trust Co., capitalized at \$1,000,000, is reported being organized by Gen. L. V. Clarke, Judge Oscar R. Hundley, Dr. G. B. Crowe, Frank H. Crookard and others.

Ala., Birmingham.—The Columbia Loan & Investment Co. has filed articles of incorporation; authorized capital \$100,000. Business is to begin with a paid-in capital of \$35,000; incorporators, John B. Weakley, B. F. Love-lady, B. A. Thompson, W. J. Rushton, F. G. McConnell and George H. Stevenson; F. W. Dixon, president; R. V. Mobley, vice-president, and R. B. Tarpy, secretary and treasurer.

Ark., Bradford.—The Bank of Bradford is reported chartered with \$10,000 capital; incorporators, Luther G. Hinkson, R. A. Cook and Alva Fraser.

Ala., Gadsden.—The Etowah Trust & Savings Bank will, it is reported, begin business February 1 with \$200,000 capital.

Ark., Russellville.—The Farmers' National Bank, capital \$25,000, has been approved; organizers, F. A. Vanderen, J. M. Ball, L. Griffin, A. D. Shinn and J. A. Smallwood.

D. C., Washington.—The Union Savings Bank will, it is reported, establish a branch at Pennsylvania Ave. and 7th St., to be known as the Central Branch.

Fla., Ocala.—Press dispatches state that the Citizens' Bank, recently reported organized, has changed its name to the Commercial Bank of Ocala. The directors are Dr. J. S. Booser, D. E. McElver, D. W. Tompkins, R. S. Hall, S. H. Martin, George Rentz, J. R. Williams and E. L. Howell.

Ga., Carnegie.—Official: The Bank of Carnegie, capital \$25,000, began business October 17 with C. J. Rambo president, Edison, Ga., and R. Ferguson cashier, Carnegie, Ga.

Ga., Garfield.—The Farmers and Merchants' Bank, capital \$25,000, is reported chartered; incorporators, L. B. Holt, president of the First National Bank of Sandersville; N. A. Proctor, R. T. Chance, B. F. Lanier, Dr. E. A. Chance, J. W. Johnson and Dr. B. F. Johnson, Garfield.

Ga., Hapeville.—The Bank of Hapeville is reported chartered; capital \$25,000; incorporators, J. O. Norris, H. W. Plunkett and others.

Ga., Roberta.—Official: The Bank of Roberta chartered; capital \$25,000. Directors: E. L. McGee, president; J. E. L. Johnson, vice-president; J. S. McGee, H. E. Saylor, C. S. Fincher and H. D. Fincher. Business began January 12.

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 J. C. WANDS, Asst. Cashier.
 JOHN B. H. DUNN, Asst. Cashier.
 Capital, \$1,500,000
 Surplus and Profits - \$900,000
 Deposits, \$12,000,000
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 OF KEY WEST, FLA.
 United States Depository and Disbursing Agent.
 Capital - \$100,000
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 (Established 1865)
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is to be organized by William S. Moore, A. F. Benjamin and W. F. Presgrave.

Mo., Parkton.—The Parkton National Bank is reported to have begun business with John Mays Little as president.

Mo., Salisbury.—The Peninsula Trust Co. is reported organized with capital and surplus of \$110,000, and business is expected to begin about February 1.

Miss., Corinth.—The Merchants & Planters' Mutual Fire Insurance Co. is reported to have filed articles of incorporation; incorporators, F. M. Henry, T. C. Barnes and Frank S. Elgin of Memphis, and Tom Richard of Marks, Miss.

Miss., Louisville.—The Merchants and Farmers' Bank has made application for a charter; capital \$15,000; incorporators, Walter Spiva, J. H. Campbell, W. D. Miller, J. T. McLeod, V. H. Cunningham, all of Louisville, Miss.; J. W. Cooke, G. W. Boyls and J. R. Boyls of Mahan, Miss.

Miss., Louisville.—The Merchants and Farmers' Bank is reported being organized with \$15,000 capital by Walter Spiva, W. D. Miller, G. W. Boyls and others.

Miss., Summit.—The Union Bank of Pike is reported incorporated with \$50,000 capital by Eugene Atkinson, J. L. Jackson, Wallace Atkinson and others.

Miss., Wheeler.—Official: The Wheeler Banking Co., capital \$10,000, is being organized by L. C. Prather of Baldwin, Miss., and others.

Mo., St. Louis.—The Farmers' Land & Loan Co., Suite 805 New National Bank of Commerce Bldg., has filed articles of incorporation; capital \$1,000,000. Directors: G. L. Williams, president; William H. O'Brien, vice-president and counsel; S. Lee Elliott, vice-president; O. B. Strunk, secretary, and W. L. Wright, treasurer.

N. C., Morganton.—Official: The Burke Real Estate & Insurance Co. incorporated; capital \$500. Duncan C. Pearson, president; Thomas N. Hallyburton, secretary, and Alphonso C. Avery, Jr., attorney. Business began January 7, 1911.

Okl., Hanna.—The First National Bank has been approved; capital \$25,000; organizers, S. J. E. Spillman, G. L. Benson, C. M. Hamilton, C. E. Taylor, J. E. Fleet and A. J. Weeden.

S. C., Orangeburg.—The Orangeburg Trust Co., capital \$1500, is reported to have been granted a commission; petitioners, J. A. Berry, C. B. Langston and J. M. O'Dowd.

S. C., Winnsboro.—The Fairfield Trust Co. is reported chartered with \$50,000 capital. Officers: L. F. Owens, president; M. W. Doty, vice-president, and J. W. Cathcart, secretary and treasurer.

Tenn., Memphis.—The Southern Trust Co. is reported to have made application for a charter; capital \$25,000; incorporators, S. E. Ragland, S. R. Martin, E. Oppenheimer, W. T. Hudson and F. Zimmermann.

Tenn., Nashville.—The Tennessee Trust Co., capital \$400,000, will, it is reported, make application for a charter. E. A. Lindsay will be president. Others said to be interested are G. N. Tillman, G. A. Washington, W. W. Dillon, D. H. Bailey, W. J. Cude, B. F. Allmatt and Henry Speery.

Tex., Clifton.—Official: The First Guaranty State Bank, chartered and incorporated succeeds the First National Bank of Clifton; capital \$20,000; surplus \$10,000; deposits \$184,000. J. W. Butler is president; J. N. Fallis, G. F. Boone and N. Jacob Nelson, vice-presidents. Business began December 30.

Tex., Elgin.—The First State Bank is reported chartered; capital \$20,000; incorporators, J. R. Brewer, G. E. Nance, E. A. Dale and others.

Tex., Fort Worth.—The Trinity Investment Co., capital \$5000, is reported chartered; incorporators, W. C. Forbes, A. N. Evans, F. V. Cook and others.

Tex., Marshall.—The State Live-Stock Insurance Co. of Marshall has, it is reported, filed its charter; capital \$25,000; incorporators, M. Turney, Charles Cobb, Jr., and John Copeland.

Tex., Weston.—The Western Guaranty State Bank is reported chartered; capital \$10,000; incorporators, S. C. Stephens, Kirby Stiles, L. L. Smith, J. A. Dorsey, J. D. Brown, B. C. Parker, B. A. Comer, J. G. Gross, L. A. Adamson, B. F. Spencer and J. W. Weaver, all of Weston, and T. F. Rogers, J. S. Collins, A. E. Ragsdale and J. H. Hulme of Collinsville.

Tex., Weston.—The Western Guaranty State Bank is reported chartered; capital \$10,000; incorporators, S. C. Stephens, Kirby Stiles, L. L. Smith and others.

Va., Abingdon.—Official: The Farmers' Mutual Fire Insurance Co. of Washington County, Va., has been chartered. D. O. Pet-

tyjohn of Bristol, Va.-Tenn., and others are interested.

Va., Jonesville.—The Powell Valley National Bank has been approved; capital \$25,000; organizers, R. L. Pennington of Jonesville, Va., J. A. G. Hyatt, C. E. Flannery, J. O. Woodward and C. E. Cook.

Va., Kinsale.—Regarding the organization of the Bank of Kinsale a letter to the Manufacturers Record says that the new bank proposes to buy out the business of the L. E. Mumford Banking Co. and occupy its present banking quarters; deal not yet completed. J. E. Marsh, Jr., is among those interested.

Va., Lovingsston.—Reported that a State bank capitalized at \$10,000 has made application for a charter; directors: President, E. L. Kidd; vice-president, W. B. Lee; cashier, R. L. Camden; Henry G. Harris and James Harvey.

Va., Petersburg.—Official: The Appomattox Casualty Co. incorporated; capital \$25,000. Business began January 10 with J. W. Seward president and Dr. R. A. Gamble secretary, both of Petersburg; M. C. Doubles, treasurer, Richmond, Va.; A. G. Rogers of Richmond and W. E. Armstrong of Petersburg, directors.

Va., Petersburg.—The Appomattox Casualty Co. is reported chartered; capital \$25,000; directors: J. W. Seward, president; Dr. R. A. Gamble, secretary; M. C. Doubles, treasurer; W. E. Armstrong and A. G. Rogers, the latter of Richmond.

W. Va., Charleston.—Official: The Home Building Co. of Kanawha, to conduct a building and loan association, has been chartered with \$125,000 capital. Incorporators, R. G. Hubbard, W. B. Mathews, J. F. Brown, J. C. Morrison, A. G. Higginbotham; Geo. S. Laidley, president; J. E. Chamberlain, vice-president; B. S. Morgan, solicitor, and J. F. Bedell, treasurer. Business is to begin February 1.

NEW SECURITIES.

Ala., Florence.—An election is to be held February 7, it is reported, to vote on \$15,000 of 5 per cent. 20-year school-building bonds. C. W. Ashcroft is Mayor, and J. B. White, City Clerk.

Ala., Wetumpka.—Official: Owing to irregularity in the ballot used at the November, 1910, election, when \$170,000 of Elmore county road bonds were voted, a new election has been called for February 20. On account of November election being declared void, bonds will not be sold on January 23, as advertised. H. J. Lancaster is judge and clerk of Commissioners' Court, Elmore county.

Ark., Fort Smith.—Reports state that the Knights of the Maccabees, with supreme office at Detroit, Mich., have purchased \$50,000 of paying and sewer bonds. It is also stated that \$100,000 of additional bonds may be purchased.

Ark., Helena.—Beaver Bayou Drainage District is reported to have authorized \$100,000 of bonds.

Fla., Fernandina.—Reported that Hoehler & Cummings, Toledo, have been awarded at \$127 premium \$49,300 of 6 per cent. 5-15-year Nassau county road certificates.

Fla., West Palm Beach.—An official letter confirms report that an election is to be held January 31 to vote on \$10,000 of 5 per cent. 1-20-year bonds of special-tax school district No. 6, Palm Beach county. H. W. Lewis is superintendent of public instruction and Herbert A. Pennock chairman of the board.

Ga., College Park.—J. H. Hilsman & Co. of Atlanta are reported to have purchased at \$750 premium and accrued interest, amounting to \$1182.68, the \$65,000 of water, sewer and electric-light bonds.

Ga., Dublin.—Official: Bids will be received until noon January 17 for \$30,000 of 5 per cent. 30-year light, water and street-paving bonds; denomination \$1000; dated 1911; maturity 1941. Address W. B. Rogers, chairman finance committee.

Ky., Brandenburg.—The First National Bank of Barnesville is reported to have purchased \$1500 of 6 per cent. bonds of Brandenburg School District No. 58 at \$1505.

La., Houma.—Reported voted: Fifth ward of Terre Bonne parish, Canal Belange, school bonds.

La., Pointe a la Hache.—Press dispatches state that a bond issue of \$40,000 is planned for construction of a shell road from the St. Bernard line to the courthouse at Pointe a la Hache, in Plaquemines county.

La., Ruston.—Official: Bids will be received until 10 o'clock February 7 for \$65,000 of 5 per cent. Ruston school district bonds. Address R. B. Knott, Mayor.

Mo., Easton.—Reported that an election is to be held February 15 to vote on \$40,000 of

sewerage bonds. Martin M. Higgins is Mayor and John S. McDaniel Town Clerk.

Mo., Salisbury.—An election is to be held in Salisbury and Litaker townships February 23 to vote on \$75,000 of 5 per cent. 40-year bonds in aid of the Salisbury Railroad Co. P. B. Beard is chairman and E. H. Miller clerk Board of County Commissioners.

Miss., Georgetown.—Reported voted: \$5000 of school bonds.

Miss., Brookhaven.—Official: December 31 Lincoln county voted \$150,000 of 5 per cent. road-improvement bonds; denomination \$500. Bonds will probably run 25 years; J. W. McGrath, H. Cassidy and Estus C. Smith, Commissioners.

Miss., Hazlehurst.—Bids will be opened February 6 for \$75,000 of 5 per cent. 25-year bonds of District 1, Copiah county; dated February 6, 1911; maturity February 6, 1936; denomination \$500. Address I. N. Ellis, H. J. Wilson and M. Ramsey. J. H. Long is Clerk.

Miss., Mendenhall.—Official: Bids will be received until 4 P. M. February 7 for \$8000 of 6 per cent. 1-20-year school bonds; denomination \$100. Address H. A. Geiger, Mayor. T. F. Cross is Clerk.

Miss., Meridian.—Official: The first installment of \$50,000 of the \$200,000 issue for improvement of good roads in Supervisors' District No. 1, Lauderdale county, has been sold to Woodin, McNear & Moore. The remaining \$150,000 will be sold in instalments as the work progresses and the money is needed. W. R. Pistole is clerk of Chancery Court, Lauderdale county.

Miss., Tupelo.—Reported that city proposes issue of bonds for improvements.

Mo., Chaffee.—An official letter confirms report that bids will be opened January 18 for \$25,000 of water-works and city hall bonds.

N. C., Charlotte.—Press dispatches state that city is considering the question of issuing \$1,000,000 of bonds. Thomas W. Hawkins is Mayor.

N. C., Greenville.—Woodin, McNear & Moore of Chicago are reported to have purchased at 103.366 and interest \$75,000 of 5 per cent. 30-year Pitt county courthouse and jail bonds; denomination \$1000; dated February 1, 1911.

N. C., Raleigh.—Press dispatches state that a bill is to be introduced in the Legislature providing for \$300,000 of 30-year Wake county road bonds.

Okl., Delaware.—Reported voted: \$25,000 of water-works bonds.

Okl., El Reno.—A. J. McMahan of Oklahoma City is reported to have been awarded at par \$250,000 of water-works bonds.

Okl., Heavener.—R. J. Edwards is reported to have been awarded at par \$50,000 of 6 per cent. 25-year water-works bonds.

Okl., Hydro.—Official: December 15 city voted \$14,000 of 6 per cent. 20-year school bonds. B. D. Woods is clerk. It is desired to sell the bonds at private sale.

Okl., Oklahoma City.—Official: February 14 an election is to be held to vote on \$1,250,000 of 25-year bonds to increase present water supply; dated April 1, 1911; denominations, \$500 and \$1000. Bids for bonds will be opened 30 days after they are voted. Address Dan V. Lackey, Mayor, or Bob Parman, City Clerk.

Okl., Perry.—Bids will be received at any time, it is reported, by C. D. Jensen, clerk Board of Education, for \$30,000 of 5 per cent. 20-year Perry School District bonds; denomination \$500.

Okl., Tecumseh.—R. H. & G. A. McWilliams of Chicago are reported to have been awarded at par \$213,474.16 of 6 per cent. bonds of Little River Drainage District No. 1.

Okl., Tulsa.—Official: Seasongood & Meyer have purchased \$135,000 of 5 per cent. 20-year water improvement and sewer bonds; denomination \$1000; dated April 15, 1910. L. J. Martin is Mayor.

Okl., Wakita.—Official: R. J. Edwards & Co. of Oklahoma City have purchased \$16,000 of 6 per cent. 20-year school district bonds; denomination \$500; dated November 20, 1910.

Tenn., Bristol.—Official: The \$300,000 of Sullivan county pike bonds have been sold as follows: \$100,000 of 5 per cents to the Harris Trust Co. of Chicago, and \$200,000 of 1/2 per cents to the West German Bank of Cincinnati, O.; denomination \$1000. A movement is now started to issue \$100,000 to finish work in the county. John H. Caldwell is chairman.

Tenn., Cookeville.—Reported that an election is to be held February 25 to vote on \$100,000 of additional pike bonds for Putnam county. This county has already issued \$150,000 of pike bonds.

Tenn., Chattanooga.—Reported that a bill is to be introduced in the County Court pro-

viding for \$500,000 of Hamilton county road bonds.

Tenn., Johnson City.—Reported that \$40,000 of 5 per cent. 20-year funding bonds are to be issued.

Tex., Austin.—The Attorney-General has approved the following securities: \$2500 of 5 per cent. 15-40-year bonds of Haskell county common school district No. 19; \$6000 of 5 per cent. 10-40-year Winkler county courthouse bonds; \$11,000 of 5 per cent. 20-40-year Belton water-works bonds; \$8000 of 5 per cent. 40-year bonds of Fayette county common school district No. 61; \$150,000 of 5 per cent. 20-40-year Taylor county road district bonds; \$1500 of Harris county-building bonds; \$13,000 of 5 per cent. 10-20-year Trinity Independent school corporation, Trinity county, bonds.

Tex., Aransas Pass.—Reported voted: \$20,000 of street-improvement bonds.

Tex., Beaumont.—Press dispatches state that W. S. Davidson, chairman of the Board of Commissioners of the Beaumont navigation district of Jefferson county, has been authorized to sell at private sale \$48,000 of navigation district bonds.

Tex., Beeville.—Official: W. C. Whitney of Beaumont, Tex., who has contract for erection of Bee county courthouse, has been awarded the \$75,000 of 4 1/2 per cent. 10-40-year bonds in payment for same. San Troy is County Clerk.

Tex., Brenham.—The Commissioners' Court of Washington County is reported to have authorized the issuing of \$57,000 of Washington County District No. 1 improvement bonds.

Tex., Corpus Christi.—Reported that \$75,000 of sewer bonds have been awarded to F. H. Lancashire of Houston, contractor.

Tex., Corpus Christi.—An election is to be held, it is reported, to vote on \$50,000 of municipal wharf bonds.

Tex., Fort Worth.—Reported voted: \$2,000,000 of water-works-extension and street-improvement 4 1/2 per cent. 20-40-year bonds. W. D. Davis is Mayor.

Tex., Gainesville.—Reported voted: \$150,000 of 5 per cent. water-works bonds.

Tex., Georgetown.—Official: McCoy & Co. of Chicago were awarded at par and accrued interest \$32,000 of water and \$13,000 of light 5 per cent. 40-year bonds; denomination \$1000; dated December 1, 1910. R. E. Ward is Mayor.

Tex., Houston.—Reported voted by Harris county and Houston: \$1,250,000 of bonds for deepening Buffalo Bayou and \$500,000 of bonds for viaduct.

Tex., Houston.—The Provident Savings Bank & Trust Co. of Cincinnati is reported to have purchased at 100.051 and accrued interest \$100,000 of 4 1/2 per cent. 20-30-year street-paving bonds. Dan C. Smith, Jr., is City Secretary.

Tex., Lavon.—Reported that Lavon Independent School District proposes to issue \$10,000 of bonds.

Tex., Miles.—F. L. Fuller & Co. of Cleveland are reported to have purchased at par \$20,000 of 5 per cent. 20-40-year water-works bonds.

Tex., Nacogdoches.—Reported that the city has practically decided to call an election to vote on \$20,000 of water-plant bonds.

Tex., Nederland.—Reported that an election is to be held in school district No. 7 at Nederland on February 4 to vote on \$20,000 of school bonds. Address Judge Wilson of the Jefferson County Court at Beaumont, Tex.

Tex., Sherman.—An ordinance is to be prepared, it is reported, providing for an election to vote on \$22,000 of water-extension and \$10,000 of street-improvement bonds.

Tex., Shafter Lake.—Andrews county is reported to have voted \$8000 of 5 per cent. 10-20-year courthouse bonds.

Tex., Wichita Falls.—Reported voted: \$25,000 of street-paving bonds.

Tex., Ysleta.—An election is to be held January 21, it is reported, to vote on \$18,000 of school building bonds.

Tex., Waco.—Official: February 14 an election is to be held to vote on \$250,000 of 5 per cent. 30-year municipal light and power plant bonds; denomination \$1000. Address J. H. Mackey, Finance Commissioner.

Va., Amherst.—Reported voted: \$125,000 of Amherst county road improvement bonds.

Va., Colonial Beach.—Official: Voted—\$37,000 of 6 per cent. 25-year sewerage, water and other improvement bonds; denomination \$500. H. W. B. Williams is Mayor and J. O. Hedlin, Clerk.

Va., Norfolk.—Reported that arrangements are being made to sell \$225,000 of city bonds; also that \$250,000 of Seventh ward improvement bonds have been approved.

W. Va., Parkersburg.—On February 21 an election is to be held in Wood county and Parkersburg to vote on \$180,000 of Parkersburg district road bonds. William Dudley is County Clerk.

W. Va., Romney.—Bids will be received until March 1, it is reported, for \$15,000 of 5 per cent. 20-year water bonds. A. N. McKeever is Mayor.

At Ruston, La., bids will be received until 10 o'clock February 7 for \$65,000 of 5 per cent. Ruston school district bonds. Further particulars will be found in the advertising columns.

FINANCIAL NOTES.

The Citizens' Bank of Moultrie, Ga., is reported to have voted to increase its capital from \$40,000 to \$75,000. W. H. Barber is president.

J. H. Little has been elected president of the Charlotte National Bank of Charlotte, N. C., in place of B. D. Heath.

The Fourth National Bank of Macon, Ga., according to press dispatches, proposes to increase its capital from \$250,000 to \$300,000.

The First National Bank of Dublin, Ga., it is reported, has increased its capital from \$50,000 to \$100,000.

The First National Bank of Wadesboro, N. C., it is reported, proposes to increase its capital from \$50,000 to \$100,000.

The Bank of Eufaula at Eufaula, Ala., according to press dispatches, has increased its capital from \$50,000 to \$100,000.

The conversion of the Chaffee State Bank of Chaffee, Mo., into the First National Bank of Chaffee has been approved; capital \$25,000.

The Moultrie Banking Co. of Moultrie, Ga., is reported to have amended its charter, increasing its capital from \$50,000 to \$100,000.

The Farmers and Merchants' Bank of Lake City, S. C., has, according to press dispatches, been authorized to increase its capital from \$25,000 to \$50,000.

The Merchants and Farmers' Bank of Roanoke, Va., is reported to have voted to increase its capital from \$60,000 to \$75,000. R. W. Griffin is president.

The conversion of the Johnston County State Bank of Milburn, Okla., into the First National Bank of Milburn has been approved; capital \$25,000.

The Commercial National Bank of Macon, Ga., will, it is reported, increase its capital

from \$125,000 to \$200,000. E. Y. Mallary is president.

A. G. Brenner has been elected president of the Commercial National Bank of Charlotte, N. C., and R. A. Dunn, the former president, has been made first vice-president.

The Trust Company of Georgia at Atlanta, Ga., will, according to press dispatches, soon increase its capital from \$500,000 to \$1,000,000. Ernest Woodruff is president.

The Sentinel State Bank and the Citizens' State Bank, both at Sentinel, Okla., are reported to have consolidated under the name of the Citizens' State Bank. E. D. Foster is president, and D. W. Study, cashier.

A condensed statement of 247 State banks doing business in Virginia November 10, 1910, shows total resources, \$68,720,069; loans and discounts, \$49,002,268; total cash on hand, \$2,518,464; capital stock paid in, \$10,406,525; surplus fund, \$1,639,854; undivided profits, less interest, taxes and expenses, \$2,210,993; dividends unpaid, \$5590; total deposits, \$43,072,781.

SURETY BONDS

Fidelity and Deposit Co.

OF MARYLAND

Home Office, BALTIMORE, MD

Assets Over \$5,000,000

Pioneer Surety Co. of the South.
Becomes Surety on bonds of every description.

AGENTS IN ALL PRINCIPAL CITIES

HARRY NICODEMUS, Sec'y and Treas. EDWIN WARFIELD, President

CHARLES NEVILLE

Accountant and Auditor
BUSINESS SYSTEMS

212-213 National Bank Building
SAVANNAH, GA.

Long Distance Phone. References—Any Bank in Savannah.

PUBLIC ACCOUNTANTS

The South-Eastern Audit Co.
COLUMBIA, S. C.

Incorporated Under Special Act of Legislature

BALTIMORE AUDIT COMPANY

1027-1029 Calvert Bldg., BALTIMORE, MD.

All work executed by or under direct supervision of Certified Public Accountants.

CONDENSED REPORT TO COMPTROLLER

The First National Bank

OF BIRMINGHAM, ALA.

ALABAMA'S FIRST MILLION-DOLLAR BANK

SATURDAY, JANUARY 7, 1911.

RESOURCES

Loans and Discounts.....\$7,824,126.75
Overdrafts.....262.12
U. S. Bonds and Premiums. 1,117,500.00
State of Alabama Bonds... 157,500.00
Other Stocks and Bonds... 356,500.00
Banking House.....145,000.00

CASH

In Vault.....\$1,249,823.01
With Banks.. 3,026,707.54
With U. S. Treasurer.. 81,500.00

\$ 4,358,030.55

\$13,958,919.42

LIABILITIES

Capital Stock.....\$ 1,500,000.00
Surplus and Profits..... 1,455,803.10
Circulation..... 970,100.00

DEPOSITS

Individual...\$8,004,855.08
Bank..... 1,948,901.16
United States. 79,260.08

\$10,033,016.32

\$13,958,919.42

OFFICERS

W. P. G. HARDING, President

J. H. WOODWARD, Vice-President

THOMAS HOPKINS, Cashier

THOMAS BOWRON, Asst. Cashier

J. E. OZBURN, Secretary Savings Department

J. H. WETMORE, Auditor

J. H. BARR, Vice-President

F. S. FOSTER, Asst. Cashier

J. K. FLEMING, Asst. Cashier

PARTICULAR ATTENTION GIVEN TO COLLECTIONS
DIRECT CONNECTIONS AT ALL ALABAMA POINTS

The Home Insurance Co.

No. 56 CEDAR STREET
NEW YORK, N. Y.

ONE HUNDRED AND FIFTEENTH SEMI-ANNUAL
STATEMENT

JANUARY, 1911

SUMMARY OF ASSETS:

	Par Value.	Market Value.
Cash in Banks and Trust Companies		\$2,823,450 84
Real Estate		1,150,000 00
United States Bonds.....	\$385,000 00	432,750 00
State and City Bonds.....	5,858,333 33	5,727,166 00
Railroad Bonds	6,803,000 00	6,498,410 00
Miscellaneous Bonds	750,000 00	654,500 00
Railroad Stocks	6,830,000 00	8,574,875 00
Miscellaneous Stocks	1,370,000 00	1,745,200 00
Bank and Trust Co. Stocks.....	160,000 00	482,000 00
Bonds and Mortgages, being 1st lien on Real Estate.....		48,300 00
Premiums uncollected, in course of transmission and in hands of Agents		2,042,261 79
		\$30,178,913 63

LIABILITIES:

Cash Capital	\$3,000,000 00†
Reserve Premium Fund.....	11,645,873 00
Reserve for Losses	1,168,315 74
Reserve for Re-insurance and other claims.....	235,111 71
Reserve for Miscellaneous Accounts due and un- paid	100,000 00
Reserve for Taxes.....	200,000 00
Reserve as a Conflagration Surplus.....	1,500,000 00†
Surplus over contingencies and all liabilities, in- cluding capital	12,329,613 18†
	\$30,178,913 63

Surplus as regards policyholders - \$16,829,613.18†

DIRECTORS:

LEVI P. MORTON,
CORNELIUS N. BLISS,
ELBRIDGE G. SNOW,
GEORGE H. HARTFORD,
HENRY F. NOYES,
LUCIEN C. WARNER,
JOHN CLAFLIN,

JOHN H. FLAGLER,
EMANUEL H. A. CORREA,
WILLIAM D. BALDWIN,
LEWIS L. CLARKE,
CLARENCE H. KELSEY,
WILLIAM IVES WASHBURN.

ELBRIDGE G. SNOW, President

EMANUEL H. A. CORREA, Vice-President
FREDERIC C. BUSWELL, Vice-President
CLARENCE A. LUDLUM, Asst. Secretary

AREUNAH M. BURTIS, Secretary
CHARLES L. TYNER, Secretary
HENRY J. FERRIS, Asst. Secretary

New York, January 10, 1911

Classified Opportunities

AGENCIES WANTED

WE are prepared to represent manufacturers as distributors in the Southern States; facilities for storing and location for distribution unexcelled. Write us, W. L. Lamar & Co., 77 S. Broad St., Atlanta, Ga.

WANTED—Sales agency for all lines pertaining to builders' material; East Tennessee as territory; can furnish satisfactory references to interested concern. Address Daniel Briscoe, Jr., Knoxville, Tenn.

TO REPRESENT on commission basis manufacturers of mine, furnace and mill machinery and equipment; Birmingham district, Alabama, as territory. Address No. 728, care Manufacturers Record.

WANTED—To communicate with a manufacturer or wholesale firm who desires a bonded broker or distributing agent for Kansas and Oklahoma; have good warehouse facilities. Address Box 888, Wichita, Kansas.

AGENTS AND SALESMEN WANTED

WANTED—Good reliable men to handle our line of vehicle rims as a side line on commission. We also want them to get in touch with concerns wanting special bending work. May Bending Works, Steubenville, Ohio.

WANTED—Traveling salesmen in different sections of the country for all or part of time, to sell the mill, manufacturing and hardware and oil companies; staple lines; goods well known and advertised; commission or salary; excellent side line; good salesmen can average \$100 per week. Address The Alcatraz Company, Richmond, Va.

WANTED—Real salesmen acquainted with building and contract work to handle concrete mixers. The American is a batch mixer giving a perfect mix either wet or dry. It is sold under a liberal commission arrangement without requiring any financial investment by the agent. A good seller in other sections and should prove attractive in the South with pushing. Address Cargill Mfg. Co., 567 Buttles Ave., Columbus, Ohio.

SOUTHERN AGENCY.—Wanted—Agent for Southern territory by a corporation manufacturing structural and railroad paints and specialties; high-grade proposition, on commission basis, with exclusive territory and considerable trade already established, to right party. Address No. 731, care Manufacturers Record.

WANTED—First-class experienced fertilizer salesman, acquainted with the Alabama trade. Address, stating age, experience and salary expected, Box 83, Montgomery, Ala.

A MANUFACTURING concern located in the South desires the services of a high-class practical sales manager who is also familiar with factory production and management; would prefer party who could become financially interested, but this is not essential; thorough acquaintance with cotton mills in Carolinas and Georgia necessary. Address No. 724, care Manufacturers Record.

WANTED—By well-known belting manufacturing concern, salesman in a Southern territory; must have experience; compensation dependent entirely on results, with fair guarantee to start. Address No. 732, care Manufacturers Record.

HELP WANTED

WANTED—Mattress maker who understands thoroughly the making of excelsior and mattresses; young man preferred; must come well recommended. State salary and when can come in first letter. Address W. L. Pitts, Secretary Progressive League, Marshall, Texas.

SITUATIONS WANTED

WANTED—Position as traveling salesman; all I want is a foothold; conscientious, painstaking effort will do the rest; best of references. Address P. O. Box 68, Lakeview, N. C.

CIVIL ENGINEER, 15 years' experience, covering difficult U. S. Government survey work, general concrete construction and municipal work, including street paving, design and construction of sewerage systems; good executive ability and can handle any kind of construction work; best of references, among them consulting engineers of note. Address No. 734, care Manufacturers Record.

MANAGER of Southern lumber company now going out or business desires new connection; 10 years' experience in export, wholesale and retail yellow pine, cypress and hardwoods; desire position with manufacturer or in any enterprise where good address, integrity and judgment in handling men or affairs is demanded; am 35 years old, married and settled; efficient in office, good buyer or salesman, experienced financier; best references. Address No. 726, care Manufacturers Record.

A COMPETENT superintendent of construction, capable of handling any kind of construction work, is open for a position; have had 20 years' experience and can furnish good references. Address No. 723, care Manufacturers Record.

Rate 20 cents per line per insertion. Minimum space accepted, four lines. Maximum space accepted, 24 lines. Allow seven words per line. Terms: Invariably cash with order; check, postoffice or express order or stamps accepted. No display type used. Questionable or undesirable advertisements will not be accepted. The assistance of our readers in excluding undesirable advertisements is requested. We reserve the right to refuse any advertisement. No patent medicine, whiskey or mining stock advertisements accepted. Rate for special contracts covering space used as desired within one year, as follows: 100 lines, 18c. per line; 300 lines 16c. per line; 500 lines or more, 15c. per line.

WANTED—Position by competent mechanical and electrical engineer, age 36, with 15 years of practical experience in the erection and maintenance of steam, gas and electrical machinery, and with both A. C. and D. C. currents and line construction; desires to communicate with any Southern firm in need of a master mechanic or chief engineer; will accept position at nominal salary to start with, with increase at a fixed time contingent upon results. Address, with full particulars, No. 722, care Manufacturers Record.

PRACTICAL, scientific, experienced mining man, understands managing, operating, developing of mines, minerals, metals, properties, open for a position. L. Sherard, Evergreen, Ala.

MANAGER WANTED

MANAGERS WANTED for several wood-working and machine and metal-working plants; must be of proven ability and in position to take small amount of stock. McAlister Commercial Club, McAlester, Okla.

UNUSUAL OPPORTUNITY.—Manager wanted to take charge of factory end of largest plant in the South manufacturing sash, doors, blinds, interior finish and hardwood work. The right man must be able to take some stock so as to be interested in business. Woodward Lumber Co., Atlanta, Ga.

COMMERCIAL SECRETARY WANTED

WANTED—A competent man as commercial secretary for Norton Board of Trade. Address, with reference, Chas. Hall, Jr., Norton, Va.

EDUCATIONAL

RENSSELAER POLYTECHNIC INSTITUTE, TROY, N. Y.—Courses in Civil, Mechanical and Electrical engineering, and General Science, leading to the degrees of Civil Engineer (C.E.), Mechanical Engineer (M.E.), Electrical Engineer (E.E.), and Bachelor of Science (B.S.). Special courses in engineering and science. Splendidly equipped new engineering laboratories. Send for catalogues to Registrar.

BANKS

THE CITIZENS' BANK OF NORFOLK, Va., capital \$300,000, surplus \$375,000, solicits accounts of banks, firms, corporations and individuals.

COMMERCIAL STATE BANK, Birmingham, Ala. State depository. Prompt attention to Alabama collections.

THE PALMETTO NATIONAL BANK, Columbia, S. C., capital \$250,000, solicits accounts of banks, firms, corporations and individuals, either commercial or savings accounts.

BUSINESS OPPORTUNITIES

WANTED—Party to invest \$20,000 and assist in active management of a 50-ton ice factory with coal and wood business in connection; plant located in a Southern rapidly-growing railroad center of 10,000, is in a prosperous condition and paying 20 per cent. on investment. Opportunity for enlargement is ripe, but principal owner cannot undertake additional work on account of advancing years. Will pay salary adequate to ability. Unless you mean business and have money and are competent for active assistance don't reply. Knowledge of this particular business is not requisite. Address No. 713, care Manufacturers Record.

I HAVE about 10,000 acres of fertile black loam agricultural land in Southern Louisiana to drain and market, which will yield an approximate profit of 800 per cent., and am open to proposition from men with capital. Address No. 735, care Manufacturers Record.

WE BUY everything in old scrap material and pay highest market prices; no quantity too large or too small. H. Kander & Co., Bowling Green, Ohio.

FOR SALE OR EXCHANGE—Controlling stock in a prosperous manufacturing business which carries with it position as manager. For further information address F. G. Gaunt, Fort Wayne, Indiana.

WANTED—Party to patent and manufacture extension table I have just invented. Write for full particulars to No. 736, care Manufacturers Record.

WANTED—Man to assume general management of up-to-date coffin and casket factory; requirements, a good record and from \$3000 to \$5000 in cash. Virginia Coffin & Casket Co., Inc., Norton, Va.

FOR SALE—Whole or half interest in old-established, well-advertised retail business in the growing city of Greenville, South Carolina. For particulars address No. 738, care Manufacturers Record.

WANTED—To correspond with men seeking investments in Southern iron-ore propositions with view of joining in purchase; 10 years' experience as owner and operator in Georgia and Alabama iron-ore properties; references given and expected. Address No. 714, care Manufacturers Record.

FOR SALE—Grocery, feed, coal, coke and wood business in a city of 5000 inhabitants, with only three coal dealers; doing a business of \$10,000 a year; located in one of the finest cities in Michigan, with the best of schools, etc. Parties meaning business, for further particulars, write McMillen & Son, Mt. Pleasant, Mich.

65,000 ACRES LONG LEAF YELLOW PINE TIMBER, in fee simple; estimated to yield 300,000,000 to 350,000,000 feet of saw logs of good heart quality; on railroad, which divides it about in half, and which has for its southern terminus a deep-water port on the Gulf of Mexico; timber is 25 miles from the port. The railroad furnishes, through trunk-line connections transportation facilities to all interior points. The timber has never been tapped for turpentine and is in its virgin state. For map and full description address P. O. Box No. 234, Bainbridge, Ga.

EXCEPTIONAL OPPORTUNITY.—FOR SALE—One-quarter interest in 5000 acres of accessible hardwood timber in Western North Carolina can be secured for \$25,000; now being profitably operated by practical men owning balance interest. Principals only need apply, with references. Address No. 727, care Manufacturers Record.

SAWMILL, TIMBER AND RAILROAD FOR SALE.—Modern sawmill in operation, daily capacity 75,000 feet; 23,000 acres long-leaf yellow pine timber that will yield 100,000,000 feet of lumber; 28 miles of chartered railroad with trunk-line connection; for sale account of death of one of the partners. For full particulars, map, etc., address P. O. Box 234, Bainbridge, Ga.

INVEST a little money now in a few shares of good-paying stock in a sound, well-established large electric corporation in the most prosperous section of Texas; a character of investment that is the coming business of the age, which will be a fortune in old age to rely upon. You can buy now, paying for them in monthly installments. You won't miss the money, and will be providing for old age and your family in something better than life insurance, because this will grow. Interstate Engineering & Construction Co., Terrell, Texas.

FOR SALE—Up-to-date stock of hardware, implements and paints; invoice \$20,000; can reduce same; doing \$60,000 business yearly; four floors; good business; best town in north Alabama, about 20,000; seven large cotton mills and various industries; large territory for wholesale and retail; fine climate; rare chance; in business 30 years; wish to retire. M. A. Collins, Huntsville, Ala.

FOR SALE—Low price, 4½-year contract for output of boards from yellow-pine export mill in Florida; 5000 to 6000 feet per day; new drykiln, boiler, etc.; lease on planing-mill machinery, sheds, side and tram tracks; a money-maker on small investment; good reason for selling, "Excellent," P. O. Box 368, Montgomery, Ala.

FOR EXCHANGE—12 forties cut-over, Northern Wisconsin; mineral reserved; that's common in the iron belt; \$7 acre; want farm equal value, Delaware, Maryland, Virginia; describe fully; give legal number. A. M. Kauffman, Lockridge, Ia.

MINING EXPERT wants financial backing for a proposition that will yield \$100,000,000 or more; no possible loss. Sherard, Evergreen, Ala.

TYPEWRITERS

TYPEWRITERS.—Real Remington, \$12.00; Calligraphs, \$6.00; Hammonds, Yost, Denmores or Williams, \$12.00; Smith Premiers, \$15.00; Oliverts, \$21.00; Underwoods, \$25.00. Fifteen days' free trial, and our guarantee. Four typewriter ribbons, \$1.00. Typewriter Exchange, Dept. M. R., 211 West 125th St., New York City.

TYPEWRITERS—All makes, slightly used or rebuilt; guaranteed; shipped anywhere on approval; best bargains in America. Write today. Money back if dissatisfied. Fletcher Typewriter Co., 210 N. 7th St., St. Louis, Mo.

ENTERPRISE EXCHANGE, INC., 606 E. Baltimore St., Baltimore, Md.; remanufactured typewriters, all makes; three days' examination allowed; catalogue upon request; full line of ribbons, carbons and papers.

MONEY WANTED

CAN USE \$50,000 for five or ten years at 5 per cent.; will give first mortgage on farm property at 40 per cent. valuation. B. E. Norvell, Bay City, Texas.

LOCATIONS

WANT to correspond with party or parties contemplating locating any kind of manufacturing plant in the South; ideal location; prompt service and cheap rates both rail or water; unsurpassed climate; will aid financially any sound and paying manufacturing enterprise willing to locate here. John H. Kuck, Wilmington, N. C.

WHY PALMETTO LEADS.—The 800,000 boxes of fruits and early vegetables attests the superiority of soil, climate and irrigation necessary to produce such crops. The ease with which such crops are handled by rail and water make it an ideal place for fruit and vegetable growing. The Manatee River, Terra Ceia and Tampa bays furnish ideal salt-water fishing, boating and bathing. For further information address The Manatee River Board of Trade, Palmetto, Florida.

FACTORY SITES

DESIRE to correspond with dissatisfied manufacturers looking for more economical locations, nearness to market or proximity to raw material. Have several exceptionally fine things to offer throughout the Central West and Southern States. These are thriving, up-to-date towns, having all the requirements and advantages for successful manufacturing sites, and among friendly people who will not only welcome them, but aid them in taking care of an expanding business. The information is free and no charge made for this assistance. Address E. J. Schaur, 115 Dearborn St., Chicago, Illinois.

FOR SALE—MANUFACTURING SITE, BIRMINGHAM, ALABAMA.—I offer for sale a manufacturing site of five acres, with good buildings and exceptional facilities in the way of railroad sidings, etc.; right in the heart of Birmingham's largest suburb, within the limits of Birmingham; especially attractive to large users of pig-iron and steel. Present owners and occupants are winding up their business here and this site is offered at a bargain. Jerome Tucker, Birmingham, Ala., 207 21st St. Phone 373.

FACTORY SITE, COLUMBUS, OHIO.—One of the best in the city; 13 acres, or any part thereof, on centrally-located switch, in a large German settlement. Columbus is one of the best towns for factories in the United States, and its railroad facilities cannot be excelled. The laboring people are largely Germans and men who have moved in from the country; practically no foreign element. All Columbus industries have grown to be large institutions. Our banks furnish any amount of capital that is required to finance, enlarge and develop business. The Chamber of Commerce is alive to the interests of its home industries. Last year it gave one of the most elaborate and successful industrial expositions that has ever been held in the United States. If you contemplate a location, let us hear from you. C. A. Thomas & Co., Brunson Bldg., Columbus, Ohio.

FACTORY SITE CHEAP near the Union Steamship Company's terminal property. The factory site fronts 1040 feet on the Norfolk & Western Railroad, with a street frontage on Bowdens Ferry road and 25th street of 1160 feet, with an area of 98 lots of the usual size. This property is within 12 minutes' walk of the property recently purchased by the Old Dominion Steamship Company to be used jointly by all the steamship lines entering Norfolk. Price \$12,000. This price is subject to change without notice. Bellamy & Hough, Inc., 81 Plume St., General Agents, Norfolk, Va.

INDUSTRIES WANTED

WOODWORKING PLANTS

MARKS, MISS.—In heart of hardwoods; railroad and river; inducement to factories, etc., woodworking plants especially. Address Business League.

BAY CITY, TEXAS, wants a woodworking plant located there; has unlimited supply of good cottonwood and willow for excelsior, etc., which are extensively used throughout for wagons and implements of all kinds, and the best of elm for barrel hoops; has three trunk lines of railway, good churches and schools, and is the center of the rice industry of Texas. If interested, address Ten Thousand Club, Bay City, Texas.

MALLEABLE IRON FACTORY

MALLEABLE IRON FACTORY.—A splendid opening can be found in a growing and important city in a prosperous Southeastern State for the manufacture of malleable iron casting, including plow malleables; also clevises, forks, brackets, braces, vehicle parts, etc.; of fine ash for agricultural handles and the South, many jobbers using from one to ten tons of these products annually. Shipping facilities at the point indicated are in every sense complete and ample. The location is one of the best, and such an industry can command markets throughout the Southeast and Southwest. Refer to File No. 30,243 M. V. Richards, Land and Industrial Agent, Southern Railway, 1375 Pennsylvania avenue, Washington, D. C.

